Gene Snow
Office Copy
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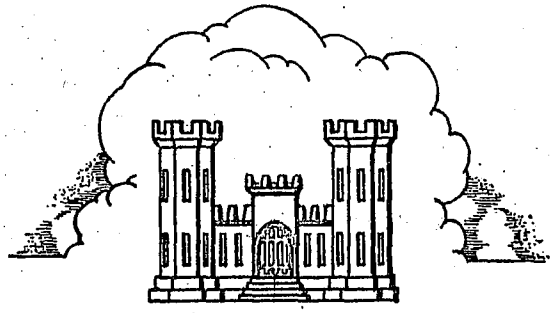
Book E

Return To
Flood Project
Inspection Section

SUPPLEMENT TO STANDARD OPERATION AND MAINTENANCE MANUAL SACRAMENTO RIVER FLOOD CONTROL PROJECT

UNIT NO. 118 - PART NO. 2
NORTH LEVEE OF AMERICAN RIVER
EAST LEVEE OF NATOMAS CANAL
BOTH LEVEES OF ARCADE CREEK
SOUTH LEVEE OF LINDA CREEK AND
MAGPIE CREEK DIVERSION CHANNEL

See
APP. F370



U. S. ARMY ENGINEER DISTRICT

CORPS OF ENGINEERS

SACRAMENTO, CALIFORNIA

File: American River O&M

January 29, 1990

Navigation and Flood Control Unit

Mr. Raymond E. Barsch, General Manager
The Reclamation Board
1416 - Ninth Street, Room 455-6
Sacramento, California 95814

Dear Mr. Barsch:

This is in reply to your letter of September 22, 1989, regarding the Cal Expo levee.

You are advised that the Corps of Engineers has no objection to abandonment of this levee. Appropriate revisions will be made to the O&M Manual to reflect this change. Copies of these revisions will be furnished to you when they are completed. (1145-2-303)

Sincerely,

KELLY/jg

A.SMITH

D. A. Dennis
Chief, Construction-Operations Division

HEIM

REW Williams

NOLAN

WHITNEY

FAST

DENNIS

PC#CALEXPO

cc:
Engr Div
Plng Div
C-O Div (Kelly)

CESPD-CO-O (CESPK-CO-O/29 NOV 89) (1130-2-320b) 3rd End Mr. Kress/om/705-1639
SUBJECT: Abandonment of Portion of Sacramento River Flood Control Project Levee

DA, South Pacific Division, Corps of Engineers, 630 Sansome Street, Room 720, San Francisco, CA 94111-2206 16 January 1990

FOR Commander, Sacramento District, ATTN: CESPK-CO-O

1. Your basic request is approved for implementation.

2. Appropriate changes to the O&M Manual, as noted in preceding endorsement, and Project Information Maps should be made to reflect this action.

FOR THE COMMANDER:

DAVID L. FULTON, Chief
Construction-Operations Division

Encls
nc

CECW-OM (CESPK-CO-O/29 Nov 89) (1110-2-1150a) 2nd End
CALDWELL/bak/272-0243
SUBJECT: Abandonment of Portion of Sacramento River Flood Control Project Levee

9 JAN 1990

HQ, US Army Corps of Engineers, Washington, DC 20314-1000

FOR Commander, South Pacific Division

This office concurs with the recommended action. We further recommend that appropriate change sheets be made to the operation and maintenance manual to show the changes and explain the action taken.

FOR THE COMMANDER:

Dan M. Maulden for

PATRICK J. KELLY
Brigadier General (P), USA
Director of Civil Works

Encls
nc

CESPD-CO-O (CESPK-CO-O/29 NOV 89) (1130-2-320b) 1st End Mr. Kress/om/705-1639
SUBJECT: Abandonment of Portion of Sacramento River Flood Control Project Levee

DA, South Pacific Division, Corps of Engineers, 630 Sansome Street, Room 720, San Francisco, CA 94111-2206 20 December 1989

FOR CDR, USACE, ATTN: CECW-OM, 20 MASS. AVE., NW., WASH DC 20314-1000

1. Forwarded for appropriate action, notification and approval.

2. Concur with Sacramento District's request.

3. Completion of the American River Flood Control Project levees has rendered the Cal Expo Levee section redundant and it no longer serves a useful purpose. No further funds should be expended for maintenance and inspection.

FOR THE COMMANDER:

DAVID L. FULTON, Chief
Construction-Operations Division

2 Encls
1. LTR 22SEP89
2. MAP

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT CORPS OF ENGINEERS
650 CAPITOL MALL
SACRAMENTO, CALIFORNIA 95814-4794

REPLY TO
ATTENTION OF

CESPK-CO-O (1110-2-1150a) 29 November 1989

MEMORANDUM FOR Cdr, SPD, ATTN: CESPK-CO-O

SUBJECT: Abandonment of portion of Sacramento River Flood Control Project Levee

1. The State of California, by letter dated 22 September 1989 (Encl 1), has requested that a portion of the right bank levee along the American River (Cal Expo Levee), authorized under the Sacramento River Flood Control Project, be abandoned because it no longer provides flood control benefits. The American River Flood Control Project levee upstream renders the Cal Expo levee unnecessary (See Map, Encl 2).

2. The Sacramento District concurs in the State of California's request.

3. Approval is requested to proceed with notification to the State of California that the Corps of Engineers has no objection to abandonment of the Cal Expo Levee.

FOR THE COMMANDER:

D. A. DENNIS
Chief, Construction-Operations Division

2 Encls
1. LTR 22SEP89
2. MAP

STATE OF CALIFORNIA–RESOURCES AGENCY

GEORGE DEUKMEJIAN, *Governor*

THE RECLAMATION BOARD
1416 Ninth Street, Room 455-6
Sacramento, CA 95814
(916) 445-9454

September 22, 1989

Colonel Jack A. Le Cuyer
District Engineer
Sacramento District
U. S. Army Corps of Engineers
650 Capitol Mall
Sacramento, CA 95814-4794

Dear Colonel Le Cuyer:

Cal Expo Levee Status

The Reclamation Board staff have determined that the levee located totally within the California State Exposition Grounds has no flood control benefit and is no longer of project levee status. With your concurrence, effective November 1, 1989, this levee as described below will no longer be inspected by the Department of Water Resources nor will applications for permits be required by The Reclamation Board.

The nonstatus levee is approximately 3,500 feet in length, extending northerly 2,000 feet from the American River project levee and easterly 1,500 feet and adjacent to Exposition Boulevard. The levee is located on the Sacramento East Quadrangle map (copy enclosed) in the northwest quarter of Section 34, Township 9 North, and Range 5 East, M.D.B.&M.

If you have any questions, please contact Ken Scribner at the above address or telephone (916) 324-3888.

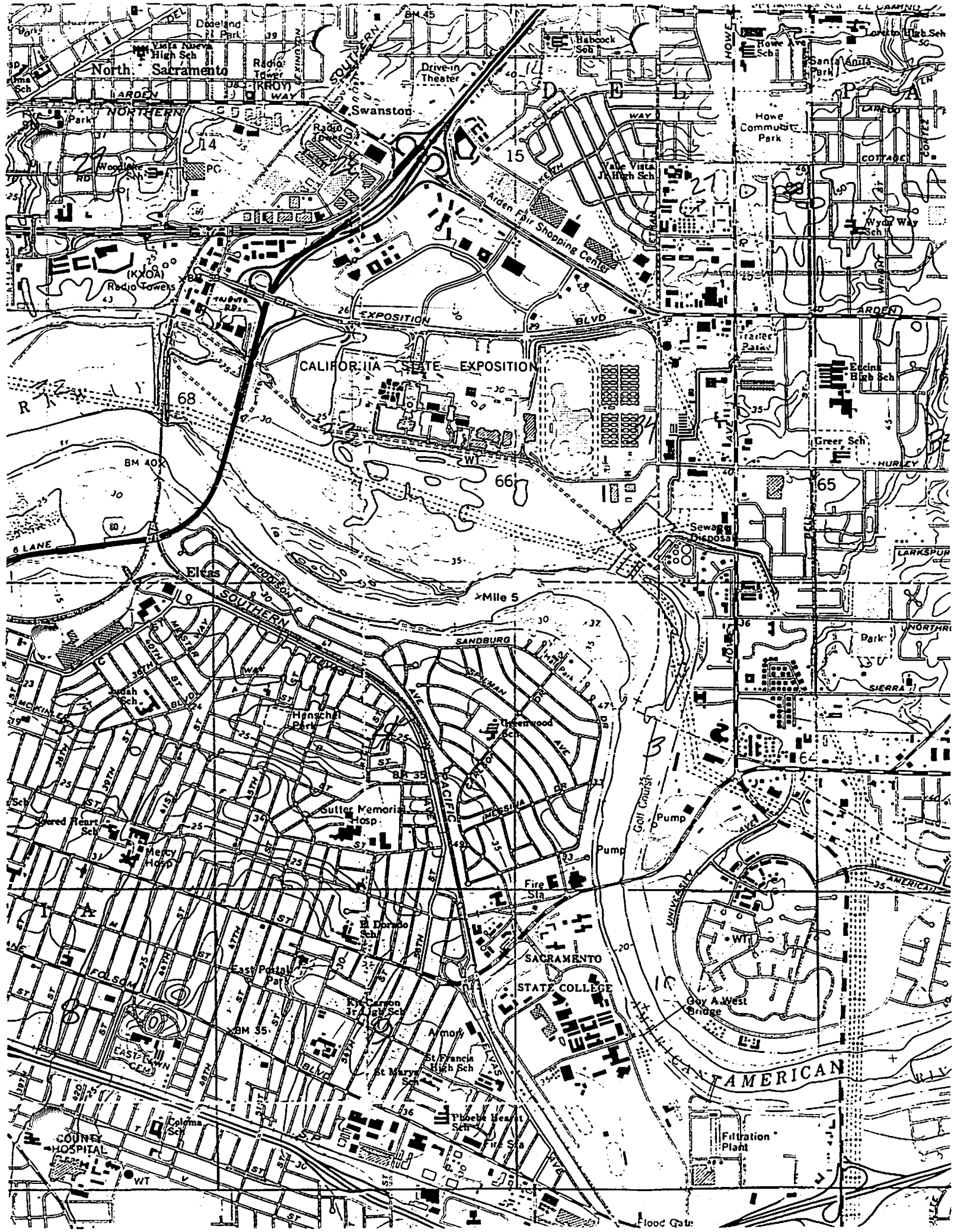
Sincerely,

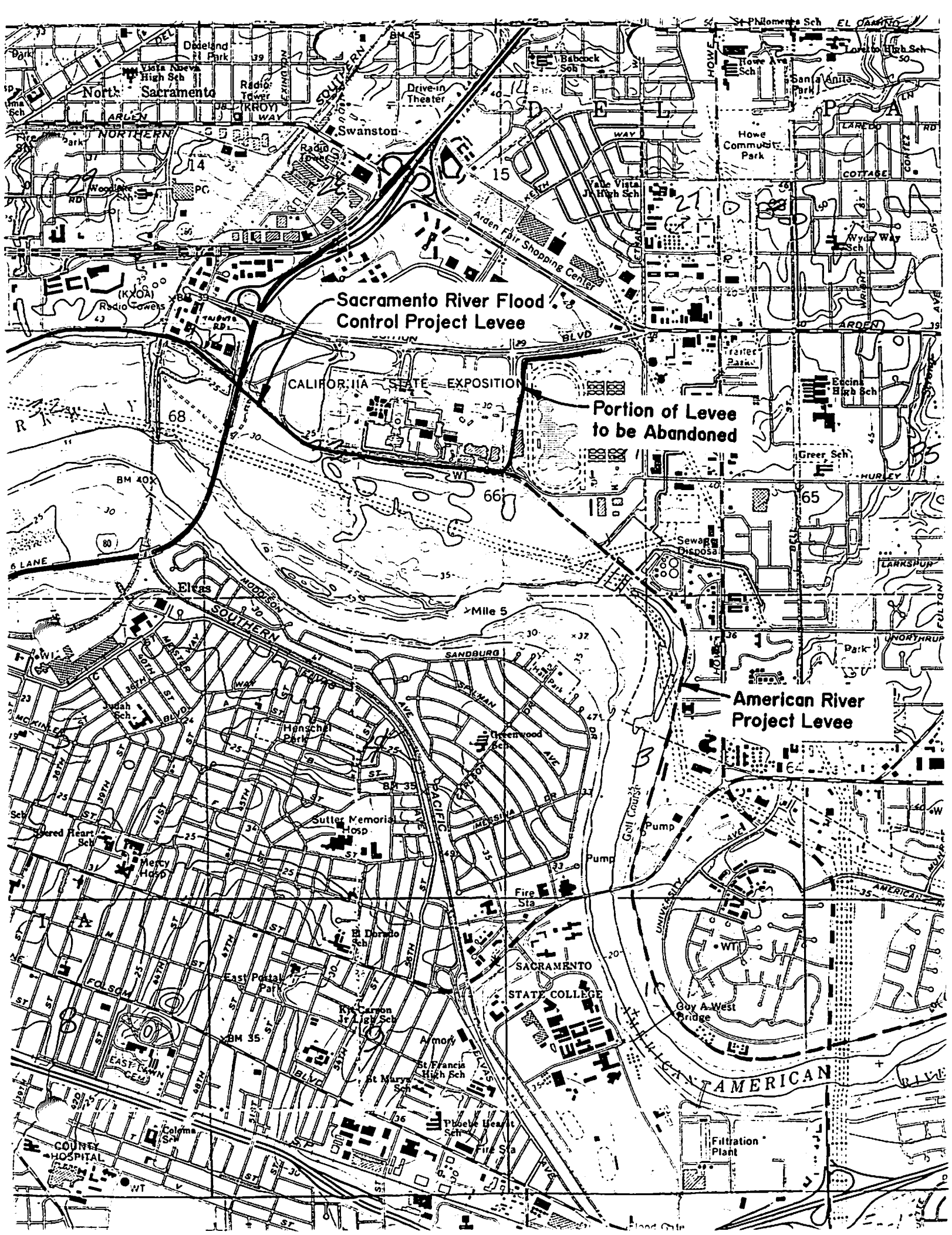
RAYMOND E. BARSCH
General Manager

Enclosure

cc: American River Flood Control District
2590 Venture Oaks Way
Sacramento, CA 95833
w/enclosure

Encl 1


North Sacramento
Swanston
Arden Fair Shopping Center
CALIFORNIA STATE EXPOSITION
EXPOSITION BLVD
Howe Community Park
Mile 5
SACRAMENTO STATE COLLEGE
Sutter Memorial Hosp
Mercy Hosp
COUNTY HOSPITAL
Flood Gate
Filtration Plant
Guy A. West Bridge
AMERICAN


Sacramento River Flood Control Project Levee
Portion of Levee to be Abandoned
American River Project Levee
CALIFORNIA STATE EXPOSITION
SACRAMENTO STATE COLLEGE
North Sacramento
Arden Fair Shopping Center
Howe Commuter Park
Swanston
Drive-in Theater
Radio Towers
Sutter Memorial Hosp
Mercy Hosp
Fire Sta
Pump
Golf Course
Guy A. West Bridge
Filtration Plant
COUNTY HOSPITAL
Sewage Disposal
Mile 5
AMERICAN RIVER

UNIT 3 ARFCD

MILE 0.00 - 0.64
CAL EXPO LEVEE WITHIN GROUNDS
OF CAL EXPO (BEHIND GRANDSTAND)
REMOVED FROM PROSECT LEVEE
STATUS ON NOV 1 1989

cfee

CORPS OF ENGINEERS
U. S. ARMY

SUPPLEMENT TO STANDARD OPERATION AND MAINTENANCE MANUAL SACRAMENTO RIVER FLOOD CONTROL PROJECT

UNIT NO. 118 - PART NO. 2
NORTH LEVEE OF AMERICAN RIVER
EAST LEVEE OF NATOMAS CANAL
BOTH LEVEES OF ARCADE CREEK
SOUTH LEVEE OF LINDA CREEK AND MAGPIE CREEK DIVERSION CHANNEL

Sacramento District
Corps of Engineers
U. S. Army
October 1959

SUPPLEMENT TO STANDARD
OPERATION AND MAINTENANCE MANUAL
SACRAMENTO RIVER FLOOD CONTROL PROJECT

UNIT NO. 118.2

UNIT NO. 118 – PART NO. 2
NORTH LEVEE OF AMERICAN RIVER
EAST LEVEE OF NATOMAS CANAL
BOTH LEVEES OF ARCADE CREEK
SOUTH LEVEE OF LINDA CREEK AND
MAGPIE CREEK DIVERSION CHANNEL

LOCATION	ADDITION OR REVISION	DATE
1-04 b.	Added contract no. 62-63	Jul 1966
Exhibit B	Added drawing no. 50-4-3702	Jul 1966
Exhibit F	Added letter of acceptance dated 29 Jun 1962	Jul 1966
1-04 c.	Added contract no. C-68-0014	Apr 1968
Exhibit B	Add drawing no. 50-4-4078	Apr 1968
Exhibit F	Added acceptance letter dated 7 Feb 1968 Jan 1966	April 1968
Exhibit F	Add copy of letter of transfer dated 8 Dec 1951	21 Dec 2010
Exhibit F	Add copy of letter of transfer dated 19 Jun 1962	21 Dec 2010
Exhibit F	Add copy of letter of acceptance dated 29 Jun 1962	21 Dec 2010
Exhibit F	Add copy of letter of transfer dated 23 Jan 1968	2 Feb 2011
1-04.	Add d. and e.	17 Jul 2013
2-01.	Add c.	17 Jul 2013
3-03.	Emergency Action Plan Requirements added	17 Jul 2013
Exhibit A	Add: Re-formatted Exhibit A Delete: Original Exhibit A	17 Jul 2013
Exhibit B	Add “Record” Drawings (NOT As-Constructed)	17 Jul 2013
Exhibit B	Add Right (North) Bank Levee Strengthening, Levee Strengthening Alternative Methods Contract A	17 Jul 2013
Exhibit F	Add copy of Right (North) Bank Levee Strengthening and Levee Strengthening Alternative Methods Contract A letter of transfer dated 17 Jul 2013	17 Jul 2013

TABLE OF CONTENTS

EXHIBITS

Exhibit	Description	
A	Flood Control Regulations (Contained in Standard Manual)	Unattached
A-1	Location Map	1 sheet
B	"As Constructed" Drawings	Unattached
C	Plates of Suggested Flood Fighting Methods (Contained in Standard Manual)	Unattached
D	Check List No. 1 - Levee Inspection Report (Contained in Standard Manual)	Unattached
E	Check List - Levees, Channels and Structures	Sheets 1 thru 9
F	Letter of Transfer to the State Reclamation Board	Sheets 1 and 2
G	Suggested Semi-Annual Report Form	Sheets 1 and 2

SUPPLEMENT TO STANDARD
OPERATION AND MAINTENANCE MANUAL
SACRAMENTO RIVER FLOOD CONTROL PROJECT

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SECTION I

INTRODUCTION

1-01. Location. The improvement covered by this manual is Unit No. 118 – Part No. 2 of the Sacramento River Flood Control Project. The levees of the American River, Natomas Canal, Arcade Creek and Linda Creek affort protection to the City of North Sacramento, California on the south, west and north sides. The area is located in the American River Flood Control District, as shown on the Location Map, Exhibit A-1.

1-02. Project Works. The flood control improvement covered by this manual is a part of the Sacramento River Flood Control Project authorized by the Flood Control Act of 1917, as modified by the Acts of 1928, 1937,1941, 1944 and 1950, and consists of the northerly levee (right bank) for the American River from the upper end of the project downstream about 3.42 miles to the Natomas Canal; the east levee and channel (left bank) of the Natomas Canal from the American River upstream about 3.95 miles to Linda Creek; levees along both banks of Arcade Creek from Natomas Canal upstream to high ground, a distance of about 2 miles; the south levee (left bank) of Linda Creek from Natomas Canal upstream to high ground, a distance of about 1.3 miles; and the diverting channel leading from Magpie Creek to Linda Creek at the upper end of the Linda Creek levee that extends for a distance of about 1.4 miles. For more details of the above, see drawings of Exhibit B. Unit No. 118 – Part No. 2 combined with Unit 118 – Part No. 1 dated August 1955 completes the required Operation and Maintenance Manuals for Unit No. 118 which is the total project works maintained by the American River Flood Control District.

1-03. Protection Provided. Levees of this unit provide direct protection to North Sacramento and suburban area and adjacent agricultural lands against flood waters of the American River, Natomas Canal, Arcade Creek, Linda Creek and Magpie Creek. Along the the right bank of the American River within this unit the grade of the adopted flood plane varies from elevation 41.8 at the upstream end to elevation 35.3 at its junction with the Natomas Canal. Along the Natomas Canal the grade fo the adopted flood plane varies from elevation 35.3 at the American River to elevation 39.6 at junction with Linda Creek. Along Arcade Creek the grade of the adopted flood plane varies from elevation 37.3 at its junction with the Natomas Canal to elevation 39.2 at its upper end. For Linda Creek the grade of the adopted flood plane is at elevation 40.0. All elevations are referred to U.S. Corps of Engineers datum. The levee grade within this unit provides for a freeboard of at least 3 feet above the adopted flood plane. In the American River the project design flood is 180,000 cubic feet per second; flow in Natomas Canal from American River to Arcade Creek 16,000 c.f.s.; flow in Natomas Canal from Arcade Creek to Magpie Creek pumping station 16,300 c.f.s.; flow in Natomas Canal from Magpie Creek to Linda Creek 16,000 c.f.s.; flow in Arcade Creek above mouth 3,300 c.f.s.; flow in Linda Creek above mouth 15,000 c.f.s.; flow in Magpie Creek to Linda Creek diversion channel 250 c.f.s.

1-04. Construction Data and Contractor Information. The construction contract required to bring locally built levees within this unit to project standards and to construct new levees was as follows:

a. Enlargement and/or construction of levees along the right bank of the American River from the upper end of the project to Natomas Canal, along the east bank of Natomas Canal and levees along Arcade and Linda Creeks was accomplished under Contract No. DA-04-167-eng-1316 by Elmer G. Wendt, Contractor, during the period from 11 April 1955 to 3 December 1955.

b. Levee rehabilitation on the right bank of the American River and left bank of the Natomas Canal (Item 56d & e, Item 56g) was accomplished under Contract No. DA-04-167-CIVENG-62-63 by Bernardo Construction Company during the period 16 April 1962 to 15 June 1962, Specification No. 2817, Drawing No. 50-4-3702.

c. Bank protection (Unit No. 12) Site Mile 5.1 on the right bank of the American River was accomplished under Contract No. c-68-0014 by A. Teichert and Son, Inc., during the period from 28 August 1967 to February 1968. Specification No. 3288, Drawing No. 50-4-4078.

d. Right (North) Bank Levee Strengthening: Slurry cutoff wall construction contract. Contract Number DACW05-99-C-0048, Specification Number 9985, Design File Number AMI-4-793. Construction was performed by Soletanche Inquip and completed in November 2000.

e. Levee Strengthening Alternative Methods Contract A: Slurry cutoff wall construction contract Contract Number DACW05-03-C-0005, Specification Number 1294, Design File Number 1-04-488. Construction was performed by DDM/Nov JV in 2003.

1-05. Flood Flows. For purposes of this manual, the term “flood” or “high water period” for this unit shall refer to flows when the water surface in the river reaches or exceeds the reading of 26.0 feet on the U.S. Weather Bureau gage located on the foot of “I” Street in the City of Sacramento. Such term shall also apply to flows in the American River, Natomas Canal, Arcade Creek and Linda Creek portions of this unit when the water surface in the American River reaches or exceeds a reading of 40.0 feet on the U.S. Geological Survey and State Department of Water Resources gage located on the “H” Street Bridge over the American River. Flood stage in Natomas Canal and tributaries is also defined as 32.0 feet on the staff gage at Silver Eagle Road. Zero of the Staff gage and recorder at the “I” Street Bridge is set at at elevation 3.10 feet U.S. Corps of Engineers datum and 0.12 feet U.S. Geological Survey Datum. Zerof the “H” Street gage is set on 0.00 U.S. Corps of Engineer datum and minus 3.07 feet U.S. Geological Survey Datum. Zero of the Silver Eagle Road is 0.00 U.S. Corps of Engineers datum. If it becomes inconvenient to read these gages, gage heights can be obtained by phoning the Flood Control Center of the State Department of Water Resources.

1-06. Assurances Provided by Local Interests. Assurance of cooperation by local interests is provided by State Legislation as contained in Chapter 3, Part 2, Division 5 of the State Water Code (see paragraph 2-02a of the Standard Manual).

1-07. Transfer to the State Reclamation Board. Responsibility for operating and maintaining the completed works within this unit transferred to the Reclamation Board of the State of California on 15 December 1955, as shown on the attached letter of acceptance, Exhibit F.

1-08. Superintendent. The name and address of the Superintendent appointed by local interests to be responsible for the continuous inspection, operation, and maintenance of the project works shall be furnished the District Engineer, and in case of any change of Superintendent, the District Engineer shall be so notified.

SECTION II

FEATURES OF THE PROJECT SUBJECT TO FLOOD CONTROL REGULATIONS

2-01. Levees.

a. Description. The levees of this unit are located as described in paragraph 1-02 of this manual. With exception of the new levee constructed along the right bank of Arcade Creek and left bank Linda Creek, levees within this unit were originally built by local interests and were rebuilt by the Corps of Engineers to project standards. For more complete detail levees and appurtenant works required to complete this unit refer to the "As Constructed" drawings of Exhibit B and paragraph 1-04 of this manual.

b. For pertinent Requirements of the Code of Federal Regulations and other requirements, see the following:

(1) Maintenance – paragraph 4-02 of the Standard Manual.
(2) Check lists – Exhibit E of this Supplement Manual.
(3) Operation – paragraph 4-04 of the Standard Manual.
(4) Special Instructions – paragraph 4-05 of the Standard Manual.

c. Cutoff Walls and CLSM. Penetrations into the slurry wall are not allowed. Any future through-the-levee encroachments, including pipes and conduits, shall be installed above the slurry wall top elevation. Modification or repair work in the vicinity of the slurry cutoff wall location should include provisions to avoid damaging the cutoff wall. Any modifications or repairs that starts at the cutoff wall and extends to the levee slope shall be restored to the original layer thickness, using the same soil material type.

2-02. Drainage and Irrigation Structures.

a. Description. Drainage and irrigation structures which extend through the levee are listed as follows:

Drainage and Irrigation Structures, cont'd.

Station	Size and Kind of Pipe	Other Description	Elev. of Invert at Pipe
	North Levee of American River		
87+73	30" steel	Pump L.S.	40.45
129+73	2-36" C.M.P.	Pump L.S.	39.50
159+35	24" steel		40.20
173+00	4" steel		45.20
180+00	12" steel		40.00
	East Levee of Natomas Canal		
216+00	30" C.M.P.	Drainage Pump L.S.	20.1
243+31	12" steel		-
264+00	12" C.M.P.	Railroad Drain	about 30.0
278+00	" "	" "	" "
292+00	" "	" "	" "
302+00	" "	" "	" "
316+00	" "	" "	" "
330+00	" "	" "	" "
335+37	4-4'6" x 4'6" R.C.	Magpie Creek Diversion Culverts	19.5
340+00	12" C.M.P.	Railroad Drain	about 30.0
358+00	" "	" "	" "
374+00	" "	" "	" "
392+00	" "	" "	" "
	North Levee Arcade Creek		
A 32+15	2-36" steel	Air and vacuum valve W.S.	35.0
A 50+68	24" C.M.P.	Riser Unit W.S.	25.2
A 65+73	24" C.M.P.	Riser Unit W.S.	29.5
A 70+09	24" C.M.P.	Riser Unit W.S.	30.4
A 77+12	24" C.M.P.	Riser Unit W.S.	32.0
A 84+62	24" C.M.P.	Riser Unit W.S.	31.3
A 90+69	24" C.M.P.	Riser Unit W.S.	33.2
A 93+36	24" C.M.P.	Riser Unit W.S.	34.0
A 96+00	24" C.M.P.	Riser Unit W.S.	35.6
A 100+28	6" steel		35.2
	South Levee Arcade Creek		
A 64+15	15" C.M.P.		27.4
A 68+40	12" C.M.P.		31.1

Drainage and Irrigation Structures, cont'd.

Station	Size and Kind of Pipe	Other Description	Elev. of Invert at Pipe
South Levee Linda Creek			
406+00	24" C.M.P.	Riser Unit W.S.	28.0
416+00	24" C.M.P.	Riser Unit W.S.	27.0
428+80	36" C.M.P.	Riser Unit W.S.	25.7
396+65	24" C.M.P.	Riser Unit W.S.	24.0
440+50	24" C.M.P.	Riser Unit W.S.	30.0
4+30	24" C.M.P.	Riser Unit W.S. (Claire Ave)	31.5
8+00	24" C.M.P.	Riser Unit W.S.	32.7
14+00	24" C.M.P.	Riser Unit W.S. (Claire Ave)	32.7
12+60	24" C.M.P.	Riser Unit W.S.	35.8
Magpie Creek Diversion			
72+10	24" C.M.P.	Riser Unit Upstream end	40.5

For location of stations listed above see Drawings No. 1-4-392, Exhibit B.

Abbreviations are as follows: C.M.P. = Corrugated Metal Pipe
L.S. = Landside
W.S. = Waterside
R.C. = Reinforced Concrete

b. For pertinent Requirements of the Code of Federal Regulations and other requirements see the following:

(1) Maintenance - paragraph 5-02 of the Standard Manual.

(2) Check Lists - Exhibit E of this Supplement Manual.

(3) Operation - paragraph 5-04 of the Standard Manual.

(4) Additional Requirements - paragraph 5-05 of the Standard Manual.

(5) Safety Requirements - paragraph 5-06 of the Standard Manual.

2-03. Channel.

a. Description. Channels of the American River, Natomas Canal, Arcade Creek and Linda Creek lie adjacent to levees as described in paragraph 1-02. The diverting channel from Magpie Creek to Linda Creek extending for a distance of about 1.4 miles has a variable channel bottom width of from 11 feet to 20 feet with levees and spoil bank across low areas. The project design capacities of said channels are as listed in paragraph 1-03 of this manual.

b. For pertinent Requirements of the Code of Federal Regulations and other requirements see the following:

(1) Maintenance - paragraph 6-02 of the Standard Manual.

(2) Check Lists - Exhibit E of this Supplement Manual.

(3) Operation - paragraph 6-04 of the Standard Manual.

(4) Safety Requirements - paragraph 6-05 of the Standard Manual.

It shall be the duty of the Superintendent to maintain a patrol of the project works during all periods of flood-flow in excess of a reading of 26.0 on the gage located at "I" Street, and a reading of 40.0 on the gage located at "H" Street, and on Natomas Canal a reading of 32.0 on the gage at Silver Eagle Road, as indicated in paragraph 1-05 of this manual. The Superintendent shall dispatch a message by the most suitable means to the District Engineer whenever the water surface in the Sacramento River or the American River reaches the gage readings indicated above. The Superintendent shall cause readings to be taken at said gages at intervals of four hours during the period when the water surface is above flood-flow stage and record the time of observations. One copy of the readings shall be forwarded to the District Engineer immediately following the flood, and a second copy transmitted as an inclosure to the semi-annual report in compliance with paragraph 3-06 of the Standard Manual.

2-04. Miscellaneous Facilities.

a. Description. Miscellaneous structures or facilities which were constructed as a part of, or in conjunction with, the protective works, and which might affect their functioning, include the following:

(1) Bridges.

(a) The El Camino Road Bridge corssing the Natomas Canal at approximate station 225+80.

(b) The W.P.R.R. trestle at the junction of Arcade Creek and Natomas Canal - approximate station 257+00.

(c) The Silver Eagle Road Bridge crossing the Natomas Canal at approximate station 296+25.

(d) The Lower Marysville Road Bridge (also Main Ave) crossing the Natomas Canal at approximate station 388+60.

(e) The Sacramento Northern R.R. Bridge crossing Arcade Creek at approximate station A63+75.

(f) The Rio Linda Blvd. Bridge crossing Arcade Creek at approximate station A68+00.

(g) A footbridge crossing Arcade Creek at approximate station A82+93.

(h) The Sacramento Northern R.R. Bridge crossing Linda Creek at approximate station ℄ 90+00.

(i) The Rio Linda Blvd. Bridge crossing Linda Creek at approximate station 475+25.

(j) The Dry Creek Road Bridge crossing the Magpie Diversion Channel at approximate station ℄ 24+00.

(k) The W.P.R.R. Bridge crossing the American River at approximate station 174+90.

(l) Highway No. 40 Bridge (16th Street) crossing the American River at approximate station 173+80.

(m) S.P.R.R. Bridge crossing the American River at approximate station 89+00.

(n) Elvas Highway Bridge crossing the American River at approximate station 89+00.

(o) A low water culvert crossing on Linda Creek at approximate station 4+00.

(2) Flood Gate. A flood gate in the American River right bank levee at Station 176+85 (lower 16th Street), will be closed by the Public Works Department of the County of Sacramento after warning is issued by the American River Flood Control District that a flood is imminent.

(3) Utility Relocation. Because of the nature of the construction of structures by local interests, no records of any utility relocations are available.

(4) Hydrographic Facilities. Continuous water stage recorders and staff gages to be maintained by the following Government Agencies:

(a) U. S. Weather Bureau gage on the Sacramento River located at the foot of "I" Street.

(b) U. S. Geological and State Department of Water Resources gage located on the left bank at the "H" Street Bridge over the American River. A "Telemark" water stage indicator is maintained at this station.

(c) U. S. Corps of Engineers staff gage located on upstream side of west abutment of bridge at Silver Eagle Road over Natomas Canal.

b. For pertinent Requirements of the Code of Federal Regulations and other requirements see the following:

(1) Maintenance - paragraph 7-02 of the Standard Manual.

(2) Check Lists - paragraph 7-03 of the Standard Manual.

(3) Operation - paragraph 7-04 of the Standard Manual.

For location of stations referred to above see the drawings 1-4-392, Exhibit B.

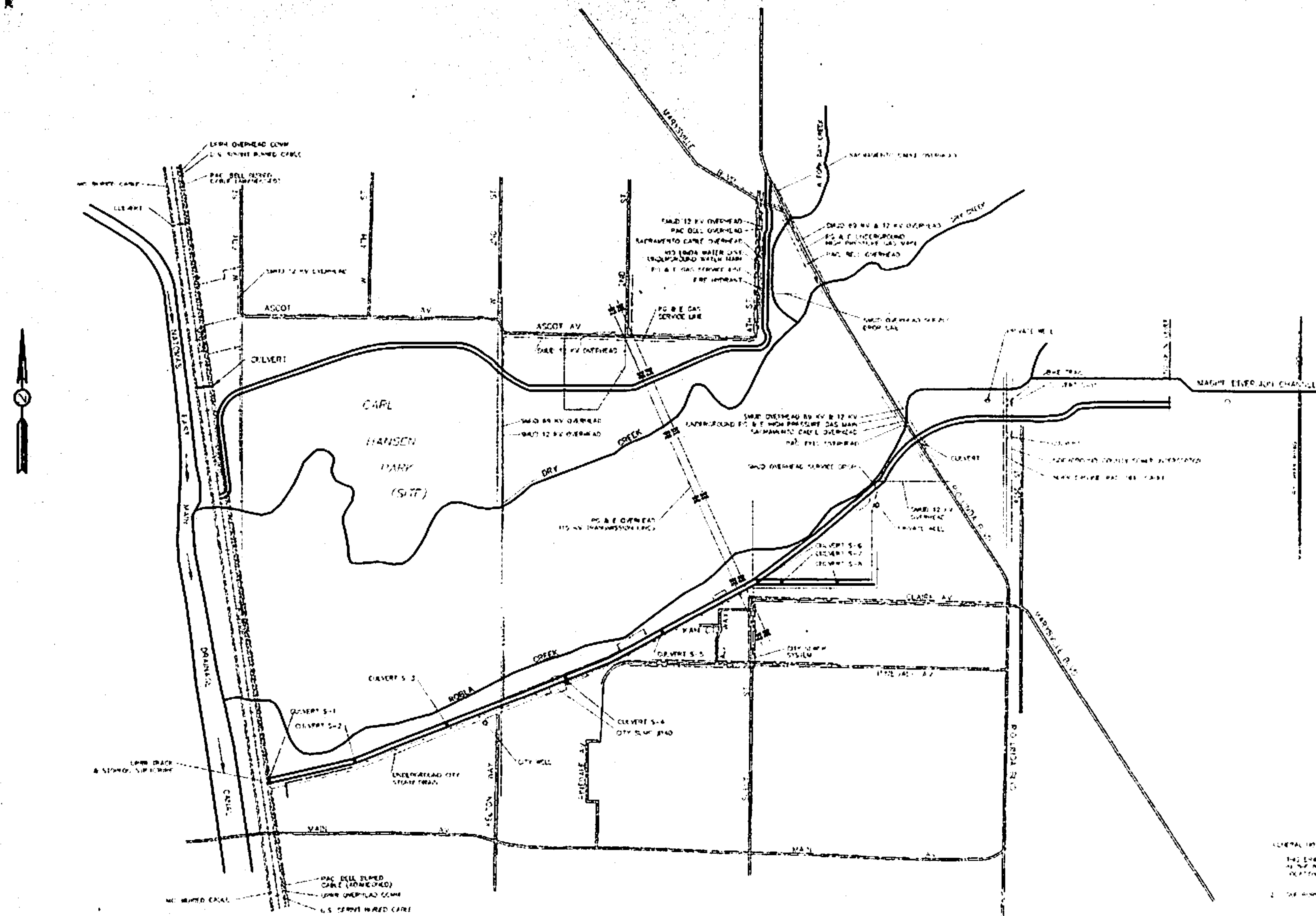
SECTION III

REPAIR OF DAMAGE TO PROJECT WORKS AND METHODS OF COMBATING FLOOD CONDITIONS

3-01. Repair of Damage. In the event of serious damage to the project works, whether due to flood control conditions or other causes, and which may be beyond the capability of local interests to repair, the Superintendent will contact a representative of the Division of Water Resources, State of California, who coordinates maintenance of project works of the Sacramento River Flood Control Project. The state representative will give assistance or advice, or will determine appropriate action to be taken.

3-02. Applicable Methods of Combating Floods. For applicable methods of combating flood conditions, reference is made to Section VIII of the Standard Manual and Maintenance Manual, revised May 1955, where the subject is fully covered.

3-03. Emergency Action Plan. The Superintendent shall maintain documentation of levee system-specific emergency procedures and emergency contact personnel



UTILITY CONTACTS

UTILITY	REPRESENTATIVE	PHONE No.
UNDERGROUND SERVICE ALERT		[illegible]
GAS (PG & E)	[illegible]	[illegible]
ELECTRICAL (SMUD)	[illegible]	[illegible]
TELEPHONE (PAC BELL)	[illegible]	[illegible]
CABLE TELEVISION (SACRAMENTO CABLE)	[illegible]	[illegible]
TELEPHONE (MCI)	[illegible]	[illegible]
TELEPHONE (US SPRINT)	[illegible]	[illegible]
UNION PACIFIC RAILROAD	[illegible]	[illegible]
[illegible] TRANSMISSION LINES (PG & E)	[illegible]	[illegible]
WATER & DRAINAGE (CITY) CITY OF SACRAMENTO	[illegible]	[illegible]
WATER (COUNTY) RIO LINDA WATER DISTRICT	[illegible]	[illegible]

NOTE:
[illegible]

REV	DATE	BY	CHK	APPR	DESCRIPTION
	2-16-95	MSM	SRS	FHE	ISSUED FOR BID

DESIGNED BY
DRAWN BY
CHECKED BY MSM
IN CHARGE FHE
DATE 2-16-95

ENSIGN & BUCKLEY
CONSULTING ENGINEERS
SACRAMENTO

SUBMITTED
APPROVED

SACRAMENTO AREA FLOOD CONTROL AGENCY

DRY / ROBLA CREEK

GENERAL LOCATION MAP OF EXISTING UTILITIES

G-5 | 5

EXHIBIT A

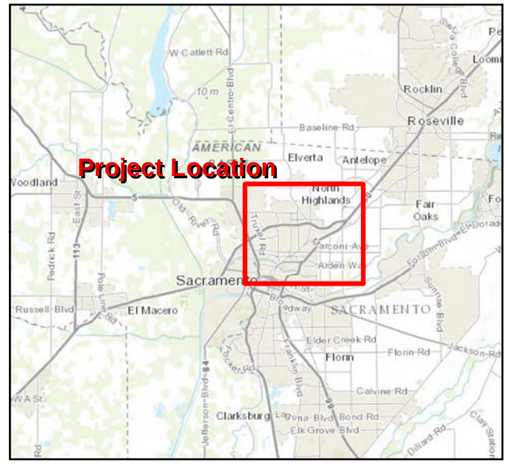
FLOOD CONTROL REGULATIONS
(See Standard Manual)

Levee Improvement Construction Contracts

Right (North) Bank Levee Strengthening
- *Contract Number DACW05-99-C-0048*
- *Design File No. AMI-4-793*

Levee Strengthening Alternative Methods Contract A
- *Contract Number DACW05-03-C-0005*
- *Design File No. 1-04-488 (R1A, R3)*

NEMDC South
- *Contract Number W91238-12-C-0041*
- *Design File No. 1-04-521*



Background Imagery: *ESRI Base Map, USA TOPO Maps*

Map Legend

Levee Extents of Project

Construction Improvement

Slurry Cutoff Wall

Other Federal Levee

Pump Station

FEDERAL LEVEE PROJECTS LOCATION MAP

SACRAMENTO RIVER FLOOD CONTROL PROJECT UNIT 118 - PART NO. 2

U.S. ARMY CORPS OF ENGINEERS SACRAMENTO DISTRICT

Map Prepared by Jim Mars

APR 2013

Exhibit B

"AS CONSTRUCTED"
DRAWINGS

FILE NO.	TITLE
1-4-392	American River, Natomas Canal, Arcade Creek and Linda Creek, in 24 sheets.

Additional drawings of cross-sections, structures, and miscellaneous facilities are available in the Office of the District Engineer.

	July 1966 – change #1
50-4-3702	Levee Rehabilitation and Patrol Roads, Vicinity of Sacramento, California, in 3 sheets.
50-4-4078	Bank Protection Various Locations Right and Left Banks Sacramento River and Feather River, in 29 sheets.

"RECORD" DRAWINGS
(NOT As-Constructed)

1-04-488	Levee Strengthening Alternative Methods Contract A: Slurry cutoff wall construction contract. Contract Number DACW05-03-C-0005, Specification Number 1294. Sheets 1-77.
AMI-4-793	Right (North) Bank Levee Strengthening: Slurry cutoff wall construction contract. Contract Number DACW05-99-C-0048, Specification Number 9985. Sheets 1-138.

EXHIBIT B
Unattached

EXHIBIT C

PLATES OF SUGGESTED FLOOD FIGHTING METHODS
(See Standard Manual)

EXHIBIT C
Unattached

EXHIBIT D

CHECK LIST NO. 1
LEVEE INSPECTION REPORT
(See Standard Manual)

EXHIBIT D
Unattached

EXHIBIT E

CHECK LISTS OF LEVEES, CHANNELS AND STRUCTURES

For definition of "flood" or "high water period", see paragraph 1-05 of this manual.

CHECK LIST NO. 2
UNIT NO. 118 - PART NO. 2

Inspector's Report Sheet No. _____ Inspector _____

Date _____ Superintendent _____

Item	Remarks
(a) Location by Station	
(b) Settlement, sloughing, or loss of grade	
(c) Erosion of both levee slopes	
(d) Condition of roadways, including ramps	
(e) Evidence of seepage	
(f) Condition of farm gates and fencing	
(g) Maintenance measures taken since last inspection	
(h) Comments	

EXHIBIT E
Sheet 2 of 9

INSTRUCTIONS FOR COMPLETING SHEET 2, EXHIBIT E
(To be printed on back of Sheet 2)

Item (a) Indicate levee station of observation, obtained by pacing from nearest reference point; indicate right or left bank.

Item (b) If sufficient settlement of earthwork has taken place to be noticeable by visual observation, indicate amount of settlement in tenths of a foot. If sloughing has caused a change in slope of the embankment sections, determine the new slope. Note areas where erosion or gullying of the section has occurred.

Item (c) If sufficient erosion or gullying of bank face of back toe of levee has taken place to be noticeable by visual inspection, indicate area affected and depth.

Item (d) Note any natural change in any section of roadway or ramps. Indicate any inadequancy in surface drainage system.

Item (e) Indicate any evidence of seepage through the embankment section.

Item (f) Indicate the serviceability of all farm gates across the embankments and roadway, and indicate if repainting is required.

Item (g) Indicate maintenance measures that have been performed since last inspection and their condition at the time of this inspection.

Item (h) Record opinion, if any, of contributory causes for conditions observed and also any observations not covered under other columns.

NOTE: One copy of the Inspector's Report is to be mailed to the District Engineer immediately on completion, and one copy is to be attached to and submitted with the Superintendent's semi-annual report.

CHECK LIST NO. 3

CHANNEL AND RIGHT-OF-WAY
UNIT NO. 118 - PART NO. 2

Inspector's Report Sheet No. _____ Inspector _____

Date _____ Superintendent _____

Item	Remarks
(a) Name of channel and location by stations	
(b) Vegetal growth in channel	
(c) Debris and refuse in channel	
(d) New construction within right-of-way	
(e) Extent of aggradation or degradation	
(f) Condition of riprapped section	
(g) Condition of bridges	
(h) Measures taken since last inspection	
(i) Comments	

INSTRUCTIONS FOR COMPLETING SHEET 4, EXHIBIT E
(To be printed on back of Sheet 4)

Item (a) Indicate station of observation obtained by pacing from nearest reference point.

Item (b) Note nature, extent, and size of vegetal growth within the limits of flood flow channel.

Item (c) Note nature and extent of debris and refuse that might cause clogging of the conduits of the irrigation intake works, fouling of the tainter gates, or the bridges over the channel.

Item (d) Report any construction along the diversion channel or above the diversion works that has come to the attention of the inspector and that might affect the functioning of the project.

Item (e) Indicate any change in grade or alignment of the channels, either by deposition or sediment or scour, that is noticeable by visual inspection. Estimate amount and extent.

Item (f) Indicate any change that has taken place in the riprap such as disintegration of the rock, erosion, or movement of the rock. Note the presence of vegetal growth through the riprap.

Item (g) Note any damage or settlement of the footings of the bridges. Indicate condition of wooden structures and if repainting is required. Indicate condition of bridge approaches, headwalls, and other appurtenances.

Item (h) Indicate maintenance measures that have been performed since the last inspection and their condition at time of this inspection.

Item (i) Record opinion, if any, of contributory causes for conditions observed, also any observations not covered under other columns.

NOTE: One copy of the Inspector's Report is to be mailed to the District Engineer immediately on completion, and one copy is to be attached to and submitted with the Superintendent's semi-annual report.

CHECK LIST NO. 4

DRAINAGE AND IRRIGATION STRUCTURES
UNIT NO. 118 - PART NO. 2

Inspector's Report Sheet No. _____ Inspector _____

Date _____ Superintendent _____

(a) Location by Station	(b) Bank	(c) Debris or other obstruction to flow	(d) Damage or settlement of pipe or conduit	(e) Condition of concrete headwall or invert paving	(f) Condition of right-of-way adjacent to structure	(g) Repair Measures Taken Since Last Inspection	(h) Comments
				North Levee of American River			
87+73	Right						
129+73	"						
159+35	"						
173+00	"						
180+00	"						
				East Levee of Natomas Canal			
216+00	Left						
243+31	"						
264+00	"						
278+00	"						
292+00	"						
302+00	"						
316+00	"						
330+00	"						
335+37	"						
340+00	"						
358+00	"						
374+00	"						

EXHIBIT E
Sheet 6 of 9

CHECK LIST NO. 4

DRAINAGE AND IRRIGATION STRUCTURES
UNIT NO. 118 - PART NO. 2

Inspector's Report Sheet No. _____ Inspector _____

Date _____ Superintendent _____

(a) Location By Station	(b) Bank	(c) Debris or other obstruction to flow	(d) Damage or settlement of pipe or conduit	(e) Condition of concrete headwall or invert paving	(f) Condition of right-of-way adjacent to structure	(g) Repair Measures Taken Since Last Inspection	(h) Comments
				North Levee Arcade Creek			
A 32+15	Right						
A 50+68	"						
A 65+73	"						
A 70+09	"						
A 77+12	"						
A 84+62	"						
A 90+69	"						
A 93+36	"						
A 96+00	"						
A100+28	"						
				South Levee Arcade Creek			
A 64+15	Left						
A 68+40	"						

EXHIBIT E
Sheet 7 of 9

CHECK LIST NO. 4

DRAINAGE AND IRRIGATION STRUCTURES
UNIT NO. 118 - PART NO. 2

Inspector's Report Sheet No. _____ Inspector _____

Date _____ Superintendent _____

(a) Location by Station	(b) Bank	(c) Debris or other obstruction to flow	(d) Damage or settlement of pipe or conduit	(e) Condition of concrete headwall or invert paving	(f) Condition of right-of-way adjacent to structure	(g) Repair Measures Taken. Since Last Inspection	(h) Comments
				South Levee Linda Creek			
406+00	Left						
416+00	"						
428+80	"						
396+65	"						
440+50	"						
4+30	"						
8+00	"						
14+00	"						
12+60	"						
				Magpie Creek Diversion			
72+10	-						

EXHIBIT E
Sheet 8 of 9

Instructions for Completing Sheets 6, 7, and 8, Exhibit E
(To be printed on back of Sheets 6, 7, and 8)

(1) Enter station of all structures under Column (a) for check list.

(2) Inspect inlet, barrel, and outlet for accumulation of sediment, rubbish, and vegetal matter. Note condition under Column (c).

(3) If any settlement or damage to the pipe, barrel, or invert of the drain has occurred, estimate the location and amount. Note particularly if any backfill has come into the pipe or been disturbed. Record observations under Column (d).

(4) Inspect the concrete portions of the structures for evidence of settlement, cracks, "pop-outs", spaces, abrasive wear, or other deterioration. Record conditions under Column (e).

(5) Inspect backfill area adjacent to structure for evidence of erosion caused by over flow of the drainage structure and note conditions in Column (f).

(6) Under Column (g) indicate physical measures that have been taken to correct conditions reported in last inspection, and their condition at time of this inspection.

(7) Under Column (h) record opinion, if any, of contributory causes for conditions observed, also any observations not covered under other columns.

(8) A copy of the inspector's report is to be mailed to the District Engineer immediately on completion, and a record copy shall be attached to the Superintendent's semi-annual report.

EXHIBIT F

LETTER OF TRANSFER TO
THE STATE RECLAMATION BOARD

C. de ARRIETA

[illegible] MAIL
Return Receipt
Requested

Letter No. 12

(12)

SPKKA 824.3(Sac. Riv. F.C.P.)

8 DEC 1951

The Reclamation Board
State of California
1100 "G" Street
Sacramento 14, California

Gentlemen:

Reference is made to your letter of 22 June 1951 acknowledging that certain reaches of the levees of the Sacramento River Flood Control Project and the waterway bank contiguous to said levee reaches meet the requirements of the project as authorized prior to the Flood Control Act of 1944.

The levee reaches in question are located as follows:

(140) a. Northerly levee of the American River from Jibboom Street Bridge to Sacramento River. 118.2 (?)

b. Easterly levee of the Sacramento River.

Reach 15 (141) (1) American River to Natomas Cut. 60.25 to 79.0 124

Reach No. 11 (142) (2) At Moulton Weir. (Man 2) 154

(143) (3) Mile 158.5 (North End Moulton Weir) to Mile 164.4 (Princeton Ferry). (man 2) ? 184

Accepted by letter dated 9 March 1953 (144) (4) Mile 168.5 to Mile 186.9 (at Butte City). (man 2) ? 138

c. Westerly levee of the Sacramento River.

(145) (1) Mile 59.9 to Mile 60.75. 116

(146) (2) Mile 61.8 to Mile 82.65 (at Bryte Bend) 116

62.65

Letter 12 Items 140 to 198

(12)

Letter No. 12

(12)

SPKEA 624.3(Sac.Riv.F.C.P.)
The Reclamation Board

c. Westerly levee of the Sacramento River. (cont'd)

147. (3) Mile 62.65 to Mile 63.1 (South End Sacramento Weir). 116

148. (4) At Sacramento Weir. 158

149. (5) Mile 63.5 (North End Sacramento Weir) to Mile 67.11. 122

150. (6) Mile 68.42 to Mile 70.9. 122

151. (7) Mile 76.5 to Mile 81.7 (East End Fremont Weir). 123

152. (8) Along Fremont Weir. 157

153. (9) Mile 84.0 (West End Fremont Weir) to Mile 85.5. 128

154. (10) Mile 85.5 to Mile 85.9. 128

155. (11) Mile 87.6 to Mile 88.4. 128

156. (12) Mile 89.2 to Mile 89.8 (Knights Landing Highway Bridge). 128

Reach No. 5

157. (13) Mile ~~89.8~~ 89.2 (Knights Landing Highway Bridge) to Sycamore Slough. 89.9 128

Reach No. 4

158. (14) Mile ~~100.6~~ 100.6 to Mile 101.4. 128

159. (15) Mile 110.9 to Mile 111.2. 128

d. Westerly levee of the Feather River.

Reach 39

160. (1). Sutter Bypass to Nicolaus Bridge. 143

161. (2) From a point 5.31 miles northerly from Nicolaus Bridge to the Fifth Street Bridge between Marysville and Yuba City. 143, 144

Reach 38

162. (3) From a point 1,400 feet northerly from the Fifth Street Bridge between Marysville and Yuba City to Station 774+00 "Y.C.N.B." Traverse. 144

163. (4) From a point east of Station 1188+00 "Y.C.N.B." Traverse to high ground just northerly from the Western Canal Headgate. 144

Reach 42

164. e. Easterly levee of the Sacramento River from Natomas Cut to Feather River. 141.1

(12)

Letter No. 12

(12)

f. Easterly levee of the Feather River.

Reach 42 (165.) (1) Sacramento River to a point 2.37 miles southerly from Nicolaus Bridge. 141 Pt 1

Reach 41 (166.) (2) Bear River to Mile 14.4.

(167.) (3) Mile 14.4 to Mile 14.7.

(168.) (4) Mile 14.7 to Mile 21.5.

(169.) (5) Mile 21.5 to Mile 22.75. 145

(170.) (6) Mile 22.75 to Mile 26.5 (Point where levee and S.N.R.R. meet). 145

g. Levees protecting the City of Marysville. All 147

Reach 43 (171.) (1) From the W.P.R.R. at Simmerly Slough easterly to the Yuba River.

(172.) (2) Along the Yuba River from the "D" Street Bridge to the back levee near the Valley Meat Company.

h. Levees protecting Reclamation District No. 10.

Reach No. 40 (173.) (1) Northerly levee of Simmerly Slough from the W.P.R.R. to the S.P.R.R. 151

(174.) (2) Easterly levee of the Feather River from Simmerly Slough to a point 4.6 miles northerly from Simmerly Slough. 151

Reach 46 (175.) i. Northerly levee of the Yuba River from the back levee of the City of Marysville to a point 1.8 miles easterly from said back levee. 147

Reach 47 (176.) j. Southerly levee of the Yuba River from Feather River (i.e. S.N.R.R.) easterly to the S.P.R.R. Main Line. 147

45 (177.) k. Northerly levee of Bear River from Feather River easterly to the W. P.R.R. Interceptor. 145

45 (178.) l. Westerly levee of the W.P.R.R. Interceptor and Clark Slough Interceptor (i.e. back levee of Reclamation District No. 784) from Bear River to the southerly end of the Clark Slough Interceptor.

145

(12)

SPKKA 824.3(Sac.Riv.P.C.P.)
The Reclamation Board

Letter No. 12

(12)

m. Southerly levee of the American River.

Reach No 25

(179.) (1) Sixteenth Street Bridge to the S.N.R.R. 118.1

(180.) (2) From a point 800 feet easterly from the W.P.R.R. to Mayhew Station. 118.1

n. Westerly levee of the Yolo Bypass.

(181.) (1) Sacramento River to Knights Landing Ridge Cut. 127

(182.) (2) Knights Landing Ridge Cut to the northeast corner of the Cache Creek Settling Basin. 126

28 (183.) (3) S.N.R.R. Woodland Branch to a point 1.6 miles southerly from said railroad. 121

28 (184.) (4) From a point 1.6 miles southerly from the S.N.R.R. Woodland Branch to the Willow Slough Pipes. 121

28 (185.) (5) From a point 1.48 miles southerly from the Willow Slough Pipes to a point 1.9 miles southerly from said pipes. 121

28 (186.) (6) From a point 1.9 miles southerly from the Willow Slough Pipes to the Willow Slough Interceptor. 121

28 (187.) (7) From the Willow Slough Interceptor to Highway U.S. 40. 120

29 (188.) (8) From Highway U.S. 40 to Putah Creek. 119

27 (189) o. Easterly and Westerly training levees of Cache Creek Settling Basin from Cache Creek southerly. 126

28 (190) p. Northerly and Southerly levees of the Willow Slough Interceptor from the S.P.R.R. to the Yolo Bypass. 120

29 (191) q. Northerly levee of Putah Creek from Yolo Bypass westerly to high ground. 119

(192) r. Southerly levee of Putah Creek from high ground on Dixon Ridge westerly to high ground. 119

s. Southerly levee of Knights Landing Ridge Cut. 127

96 (193) (1) From Yolo Bypass westerly 600 feet. Also covered under Unit 96-A

96 (194) (2) From a point 2,500 feet westerly from Yolo Bypass to a point 2,800 feet westerly from Yolo Bypass. 127
Also covered under 96-A

1000

(12)

Letter No. 12

(12)

SPKKA 824.3(Sac.Riv.F.C.P.)
The Reclamation Board

s. Southerly levee of Knights Landing Ridge Cut. (cont'd)

(195) (3) From a point 3,300 feet westerly from Yolo Bypass to a point 7,100 feet westerly from Yolo Bypass. 127
Also covered under Unit No. 96-A

(196) t. That portion of the back or westerly levee of Hastings Tract which runs east and west along the County Road for a distance of approximately one mile. 107

(197) u. Northerly levee of Sycamore Slough from Sacramento River to Knights Landing Outfall Gates. 130

(198) v. Southerly levee of Sycamore Slough from Sacramento River to Knights Landing Outfall Gates. 132

The records of this office show that your Board has accepted the levees and/or works covered by Items b.(1), b.(2), b.(3), c.(2), c.(4), c.(8), c.(11), c.(12), c.(14), d.(1), d.(3), d.(4), f.(3), f.(5), g., h., i., l., m., n.(1), n.(2), n.(3), n.(6), n.(7), n.(8), o., p., q., r. and s.(1) above, as complete. Accordingly the waterway bank contiguous to said Items is hereby transferred to the State of California for maintenance and operation.

The levee covered by Items a., b.(4), c.(1), c.(3), c.(5), c.(6), c.(7), c.(9), c.(10), c.(13), c.(15), d.(2), e., f.(1), f.(2), f.(4), f.(6), j., k., n.(4), n.(5), s.(2), s.(3), t., u. and v., above, although complete has not been formally transferred as contemplated by the Project documents. Accordingly the levee covered by said Items, together with the waterway bank contiguous thereto, is hereby transferred to the State of California for maintenance and operation.

The maintenance work required under the provisions of the Sacramento River Flood Control Project shall be performed in accordance with existing Flood Control Regulations which have been prescribed by the Secretary of the Army pursuant to Section 3 of the Act of Congress approved 22 June 1936, as amended and supplemented. As provided under paragraph 208.10(10) of these regulations, a maintenance manual covering these works is in process of preparation and will be furnished your Board upon completion.

A copy of this letter is being transmitted to the State Engineer.

FOR THE DISTRICT ENGINEER:

Sincerely yours,

H. R. Reifsnyder
Lt. Colonel, Corps of Engineers
Executive Officer

Copy Furnished:
Office, Chief of Engrs.
So.Pac.Div. Engr.
State Engineer
Engr. Div. (2)
C. de Arrieta

(12)

C
O
P Y

C O P Y

SPKKO-P 824.3 (Sac. Riv., F.C.P.)

15 December 1955

The Reclamation Board
State of California
1215 "O" Street
Sacramento 14, California

Gentlemen:

Reference is made to District Engineer's letter dated 4 November 1955, whereby arrangements were completed for making a joint inspection of certain units of the Sacramento River Flood Control Project for the purpose of transferring them, when completed, to the jurisdiction of the State of California for operation and maintenance. Reference is also made to the joint inspection of said units made on 8 November 1955.

The location and description of the units referred to above are listed as follows:

Unit No.	Location and Description Referred to Drawing No. 1-4-392
478	Levee Enlargement, American River, Right Bank, from Sta. 302+00 to 6+67.12, Globe Station upstream to upper limits of the Sacramento River Flood Control Project, approximately 3.7 miles.
479	Levee Enlargement, Natomas Canal, Left Bank from Sta. 159+85 to 596+19. Arcade Creek upstream to Linda Creek approximately 2.6 miles.
480	Levee Construction, Linda Creek, Left Bank, from Sta. 396+00 to 447+22, and from Sta. 0+00 to 17+80, Natomas Canal upstream to the upper limits of the Sacramento River Flood Control Project, approximately 6902 feet.
481	Channel Improvement and Clearing, Linda Creek, Sta. 0+00 to 90+00, Natomas Canal upstream to upper limits of the Sacramento River Flood Control Project, approximately 9000 feet.

EXHIBIT F
Sheet 1 of 2

SPKKO-P 824.3 (Sac. Riv., F.C.P.) 15 December 1955
The Reclamation Board

Unit No.	Location and Description Referred to Drawing No. 1-4-392
482	Levee Construction, Arcade Creek, Right Bank, from Sta. A 8+30 to A 99+05 and from B 0+00 to B 1+76, Natomas Canal upstream to upper limits of the Sacramento River Flood Control Project, approximately 9850 feet.
483	Levee Enlargement, Arcade Creek, Left Bank, from Sta. A 0+65 to A 110+20, Natomas Canal upstream to upper limits of the Sacramento River Flood Control Project, approximately 10,955 feet.

The units of the work, Nos. 478 to 483 inclusive, described above, were completed on 3 December 1955, under Contract No. DA-04-167-eng-1316, Specification No. 1736 and Drawing No. 1-4-392, and now meets the requirements of the Sacramento River Flood Control Project. Therefore, said units Nos. 478 to 483 inclusive, together with the waterway banks contiguous thereto, are hereby transferred to the State of California for operation and maintenance.

The maintenance work required under the provisions of the Sacramento River Flood Control Project shall be performed in accordance with existing Flood Control Regulations, inclosed herewith, which have been prescribed by the Secretary of the Army pursuant to Section 3 of the Act of Congress, approved 22 June 1936, as amended and supplemented by the current issue of the Standard Operation and Maintenance Manual for the Sacramento River Flood Control Project, dated May 1955. As provided under Paragraph 208.10 (10) of these regulations, a supplement to the Standard Operation and Maintenance Manual covering these units of work is in process of preparation and will be furnished to you upon completion.

A copy of this letter is being transmitted to the State Engineer.

Sincerely yours

Wm. J. ELY
Col, CE
District Engr.

EXHIBIT F
Sheet 2 of 2

SPKKO-P 800.8 (Sac. Riv.) 24 AUG 1955

The Reclamation Board
State of California
1100 "O" Street
Sacramento, California

Gentlemen:

In accordance with an agreement made with the State of California to do certain items of work with funds provided by the State, the following has been constructed by the Corps of Engineers under Specification No. 1788, as shown on inclosed drawing No. 1-4-392, sheet No. 10.

R. H. THOMPSON

Linda Creek

Unit No. 463 — Channel Improvement and Clearing (Sta. 0/00 to 104/30).

Magpie Creek Diversion Channel

Unit No. 463 — Channel Excavation (Sta. 0/00 to 74/00).

Unit No. 464 — North Levee Construction (Sta. 0/80 to 15/20).

Unit No. 465 — South Levee Construction (Sta. 102/50 (Linda Creek) to 15/00).

Unit No. 466 — South Levee Construction (Sta. 62/85 to 74/00).

MAGPIE CREEK DIVERSION

WEH/sc

SPKKO-P 800.8 (Sac. Riv.)
The Reclamation Board

Notification is hereby given that the foregoing work was completed on 16 August 1958.

Sincerely yours,

1 Incl
1. Dwg. No. 1-4-392 sht. No. 10

A. D. WILDER
Lt Col, CE
Acting District Engineer

Copy furnished:
State Engineer
Dept. of Public Works
Sacto., Calif.

cc: R. H. Thompson
W. K. South

Supplement #1

19 JUN 1962

SPKKO-C

The Reclamation Board
State of California
1215 "O" Street
Sacramento 14, California

Gentlemen:

Reference is made to the joint inspection made on 14 June 1962 of flood control work on a unit of the Sacramento River Flood Control Project for the purpose of transferring it to the State of California for operation and maintenance. Reference if also made to Supplement dated 29 November 1957 to the Memorandum of Understanding entered into with the State of California under date of 30 November 1953, covering added items of work required to complete the Sacramento River Flood Control Project.

The flood control work consisting of levee rehabilitation and patrol roads on the Sacramento River, American River and Natomas Canal (items listed below as indicated in the referenced supplement) was completed on 15 June 1962, in accordance with Specifications No. 2817, Contract No. DA-04-167-CIVENG-62-63 and Drawing No. 50-4-3702:

Item 56d & e -- Provide patrol road along east levee of Natomas Canal downstream from Arcade Creek with turnaround at upstream end. 118.2

Item 56f -- Provide patrol road on left levee American River from W.P.R.R. upstream to existing road. 118.1

Item 56g - - Construct road ramp at Old U.S. 40 Floodgate, right bank American River. 118.2

Item 56i -- Provide patrol road on left bank levee of the Sacramento River from S.P. Shops to Jibboom Street Bridge. 118.1

Item 101-4 -- Low 100-foot reach on the right bank of the Sacramento River immediately downstream from "I" Street Bridge raised to project grade and provided with standard patrol road. 116

SPKKO-C 19 JUN 1962
The Reclamation Board

The foregoing supplemental work, having been completed to current standards for the Sacramento River Flood Control Project, is hereby transferred to the State of California for operation and maintenance. A manual for this portion of the project has already been furnished, which adequately covers operation and maintenance requirements for the above items.

A copy of this letter is being transmitted to the Department of Water Resources.

Sincerely yours,

ARTHUR A. BECKER,
Major, CE
Acting District Engineer

1 Incl
F.C. Reg.

Copy furnished:
Dept Water Resources
23rd & "R" Streets
Sacramento, Calif.

O.C.E. w/o incl
S.P.D. w/o incl

cc: Engr Div-Lev&Chan w/o incl
Engr Div-ProDevBr w/o incl
F&A Br w/o incl
Northern Area Ofc w/o incl

6/18/62
KRISTOF
THOMPSON
JOHNSON
BECKER

THE RECLAMATION BOARD
OF THE
STATE OF CALIFORNIA

1215 O STREET
SACRAMENTO 14, CALIFORNIA
TELEPHONE: HI 5-4711

June 29, 1962

District Engineer
Corps of Engineers
U. S. Army
P. O. Box 1739
Sacramento, California

Dear Sir:

Reference is made to your letter of June 19, 1962 concerning transfer to the State of California of flood control work consisting of levee rehabilitation and patrol roads on the Sacramento River, American River, and Natomas Canal which was completed on June 15, 1962 in accordance with Specifications No. 2817:

Item 56d & e	Provide patrol road along east levee of Natomas Canal downstream from Arcade Creek with turnaround at upstream end.	118.2
Item 56f	Provide patrol road and turnaround on left levee American River from W.P.R.R. upstream to existing road.	118.1
Item 56g	Construct turnaround ramp at Old U. S. 40 Floodgate, right bank American River.	118.2
Item 56i	Provide patrol road on left bank levee of the Sacramento River from S. P. Shops to Jibboom Street Bridge.	118.1
Item 101-4	Low 100-foot reach on the right bank of the Sacramento River immediately downstream from "I" Street Bridge raised to project grade and provided with standard patrol road.	116

The Reclamation Board at its meeting of June 21, 1962 formally accepted the above referred to flood control work for operation and maintenance.

Sincerely yours,

ROBERT W. JAMES
General Manager and Chief Counsel

HSH:jc

Copy sent to -
Barcalow
Jansen

23 January 1968

SPKKO-F

The Reclamation Board
State of California
1416 - 9th Street, Room 1335
Sacramento, California 95814

Gentlemen:

Reference is made to the joint inspection of 22 January 1968, made for the purpose of transferring a portion of the Sacramento River Bank Protection work (Unit #12), to the State of California for operation and maintenance.

The flood control work consists of bank sloping and placement of 950 feet of stone bank protection on the right bank of the American River at Site Mile 5.1. The work was completed on 22 January 1968, in accordance with Specification No. 3288, Contract No. DACW05-68-C-0014, Drawing No. 50-4-4078.

The work was performed under the general authority of the Flood Control Act of 1960, 86th Congress, 2nd Session; and Section 2304(a), Title 10.

The flood control work now meets the requirements of the Sacramento River Bank Protection Project. Therefore, said flood control work is transferred to the State of California for operation and maintenance.

This portion of the project work will be added by amendment to the operation and maintenance manual, Supplement No. 118-Part 2, Sacramento River Flood Control Project. Copies will be furnished your office at a later date.

Sincerely yours,

CRAWFORD YOUNG
Colonel, CE
District Engineer

Unit 118.2

ROMPAIA/p
COLEMAN
HENSON
HUFF
YOUNG
23

Copy furnished:
Dept Water Resources

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

O.C.E.
S.P.D.

cc: Engr Div-Lev&Chan; Engr Div-ProgDev; Valley; F&A(Cordano)

Copy to A. H. 24 Jan

C
O
P
Y

THE RECLAMATION BOARD
STATE OF CALIFORNIA

C
O
P
Y

February 7, 1968

4130.60.203

District Engineer
Corps of Engineers
U.S. Army
650 Capitol Mall
Sacramento, California 95814

Dear Sir:

Reference is made to your letter of January 23, 1968 concerning transfer to the State of California of the Sacramento River Bank Protection Project, Unit No. 12, Site Mile 5.1, right bank, American River, in accordance with Specification No. 3288.

The Reclamation Board, at its meeting of February 2, 1968, formally accepted the above referred to work for operation and maintenance.

Sincerely yours,

/s/ A. E. McCOLLMAN
A. E. McCollam
Chief Engineer and
General Manager

EXHIBIT F

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO, CALIFORNIA 95814-2922

REPLY TO
ATTENTION OF

Flood Protection and Navigation Section

JUL 17 2013

Mr. Jay Punia, Executive Officer
Central Valley Flood Protection Board
3310 El Camino Avenue, Room 151
Sacramento, California 95821

Dear Mr. Punia:

This letter is to transfer the U.S. Army Corps of Engineers (Corps) completed portions of work for six contracts: Left (South) Bank Levee Strengthening Contract 1, Left (South) Bank Levee Strengthening Contract 2, Right (North) Bank Levee Strengthening Howe Avenue to Watt Avenue, Right (North) Bank Levee Strengthening, Jet Grout Sections Contract 1 and Jet Grout Sections Mod Contract 1 and Levee Strengthening Alternative Methods Contract A performed under the authority of the Water Resources Development Act of 1996 (WRDA 96) and WRDA 99. American River (Common Features) as authorized by WRDA 96 and 99 consists of lower American River levee strengthening of 8.9 miles of the right (north) bank and 10.6 miles of the left (south) bank levees, and 12.1 miles of Sacramento River east levee and berm raising.

These contracts included installation of cutoff walls along reaches of the aforementioned levees and closures of "windows," constructed between 1998 and 2004, approximately. Cutoff wall construction left "windows" in the seepage cutoff wall in the vicinity of bridge abutments, deep underground utilities and under low overhead utility lines. The cutoff wall is continuous along the levee alignment through the execution of the construction contracts described herein along with previously constructed and transferred work. Other design/construction contracts are currently underway and that work will be transferred upon completion.

The six completed construction projects are further described as follows:

Left (South) Bank Levee Strengthening Contract 1: Slurry cutoff wall construction contract. Contract Number DACW05-00-C-0022, Specification Number 9824A, Design File Number 1-04-466.

Left (South) Bank Levee Strengthening Contract 2: Slurry cutoff wall construction contract. Contract Number DACW05-00-C-0023, Specification Number 1140, Design File Number 1-04-477.

Right (North) Bank Levee Strengthening Howe Avenue to Watt Avenue, Contract Number DACW05-98-C-0053, Specification Number 9866, Design File Number 1-04-467.

Right (North) Bank Levee Strengthening, Contract Number DACW05-99-0048, Specification Number 9985, Design File Number AMI-4-793.

Jet Grout Sections Contract 1 and Jet Grout Sections Mod Contract 1, Contract Number DACW05-02-C-0004, Specification Number 1034, Design File Number 1-04-474.

Levee Strengthening Alternative Methods Contract A, Contract Number DACW05-03-C-0005, Specification Number 1294, Design File Number 1-04-488.

Record drawings and revised operation and maintenance (O&M) manuals are enclosed. Both hard-copy and electronic versions (CD) are provided.

This work meets the requirements of the Operation and Maintenance Manual, American River Flood Control Project, American River – Part No. 1 Levee Construction from Carmichael Bluffs Downstream 8.3 Miles and the following three Supplements to the Sacramento River Flood Control Project Operation and Maintenance Manual:

a. Supplement to Standard Operation and Maintenance Manual, Sacramento River Flood Control Project, Unit No. 118 – Part No. 1 East Levee of Sacramento River from American River to Tower Bridge and South Levee of American River 0.8 Miles Above Mayhew Drain Downstream to Sacramento River

b. Supplement to Standard Operation and Maintenance Manual, Sacramento River Flood Control Project, Unit No. 118 – Part No. 2 North Levee of the American River East Levee of Natomas Canal Both Levees of Arcade Creek South Levee of Linda Creek and Magpie Creek Diversion Channel

c. Supplement to Standard Operation and Maintenance Manual, Sacramento River Flood Control Project, Unit No. 124 North Levee of American River from Natomas East Canal to the Sacramento River and East Levee of the Sacramento River from Natomas Cross Canal to American River

Therefore, the above flood control work is transferred as of the date of this letter to the State of California for operation, maintenance, repair, replacement, and rehabilitation (OMRR&R).

This letter should not be construed as an endorsement for inclusion in to the National Flood Insurance Program as outlined in Title 44 of the Code of Federal Regulations Section

65.10 of the National Flood Insurance Regulations (44 CFR Section 65.10). The State of California or its designee shall prepare an Emergency Action Plan per the Manual.

If you have any questions regarding this project, please contact the Project Manager, Mr. John Hoge, at (916) 557-5304. If you have any questions regarding this transfer, please contact Mr. Ryan Larson at (916) 557-7568, Flood Protection and Navigation Section. A copy of this letter is being furnished to Mr. Rick Johnson, Sacramento Area Flood Control Agency, 1007 7th Street, 7th Floor, Sacramento, CA 95814.

Sincerely,

MICHAEL J. FARRELL
COL, EN
Commanding

Enclosures

EXHIBIT G

SUGGESTED SEMI-ANNUAL REPORT FORM

CORPS OF ENGINEERS, U. S. ARMY
Office of the District Engineer
SACRAMENTO DISTRICT
Wright Bldg., 1209-8th St.
Sacramento, California

TO: The District Engineer
Sacramento District
Corps of Engineers
1209-8th Street
Sacramento, California

(1 May 19__)
(1 Nov 19__)

Dear Sir:

The semi-annual report for the period (1 May 19__ to 31 Oceober 19__) (1 November 19__ to 30 April 19__) Sacramento River Flood Control Project, Unit No. 118 - Part No. 2, the North Levee of the American River, East Levee of Natomas Canal, both levees of Arcade Creek, South Levee of Linda Creek and Magpie Diversion Channel is as follows:

a. The physical condition of the protective works is indicated by the inspector's report, copies of which are inclosed, and may be summarized as follows:

(Superintendent's summary of conditions)

It is our intention to perform the following maintenance work in order to repair or correct the conditions indicated:

(Outline the anticipated maintenance operations for the following 6 months.)

b. During this report period, major high water periods (water level at 26.0 on the gage at "I" Street and 40.0 on the gage at "H" Street Bridge and 32.0 on gage at Silver Eagle Road) occurred on the following dates:

Dates	Maximum Elevation
_____	_____
_____	_____
_____	_____

EXHIBIT G
Sheet 1 of 2

Comments on the behavior of the protective works during such high water periods are as follows:

(Superintendent's log of flood observations)

During the high water stages when the water level reached a height of _____, on the gage or excess thereof (dates) _____, it was necessary to organize and carry out flood operations as follows:
(See Maintenance Manual _____.)

c. The inspections have indicated (no) or (the following) encroachments or trespasses upon the project right-of-way.

d. (No) (_____) permits have been issued for (the following) improvements or construction within the project right-of-way.

Executed copies of the permit documents issued are transmitted for your files.

e. The status of maintenance measures, indicated in the previous semi-annual report as being required or as suggested by the representatives of the District Engineer, is as follows:
(Statement of maintenance operations, item by item with percent completion.)

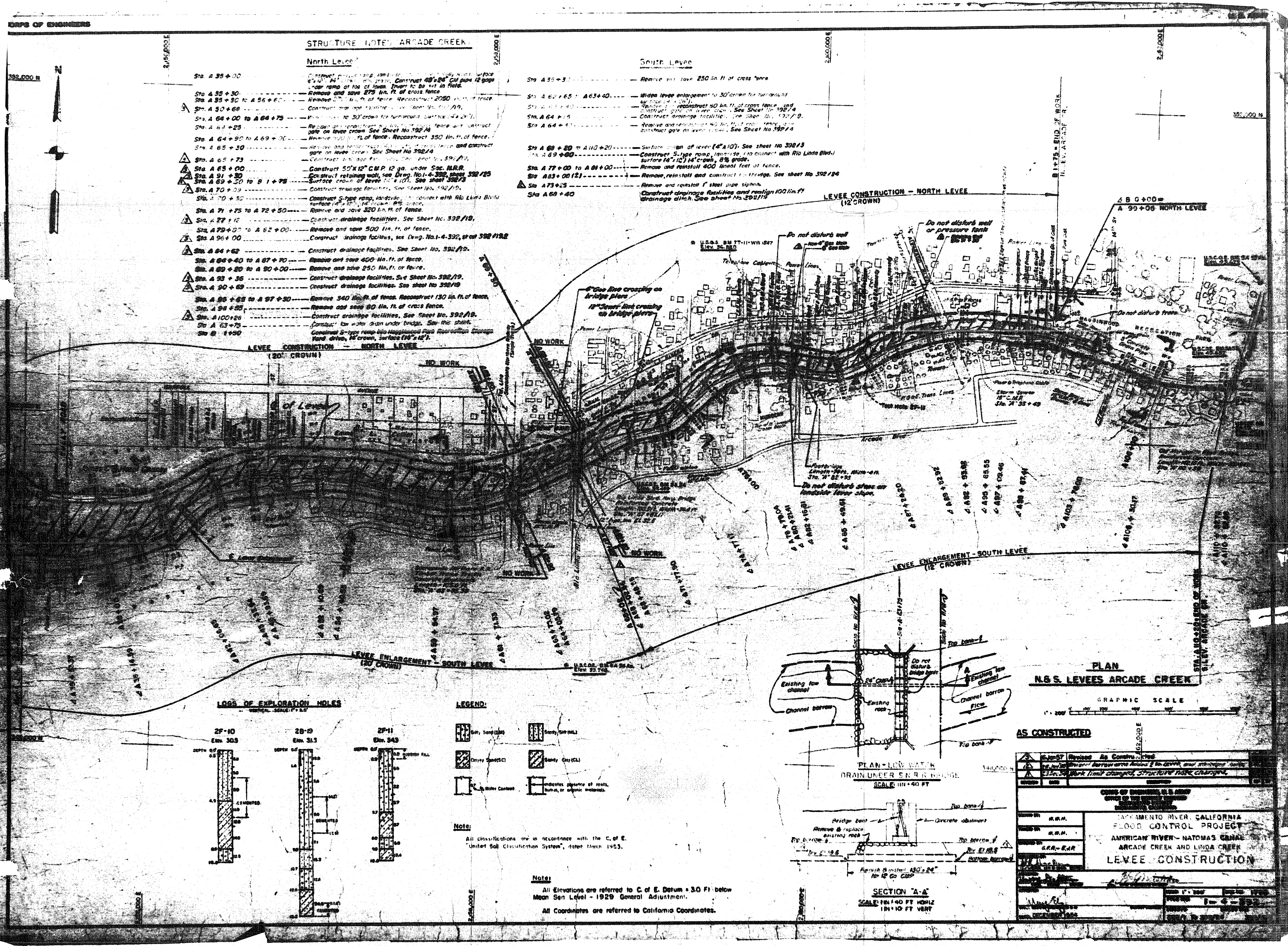
f. The fiscal statement of the Superintendent's operations for the current report period is as follows:

	Labor	Material	Equipment	Overhead	Total
1. Inspection					
2. Maintenance					
3. Flood fighting operations					
TOTAL					

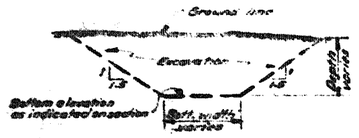
Respectfully submitted,

_____
Superintendent of Works

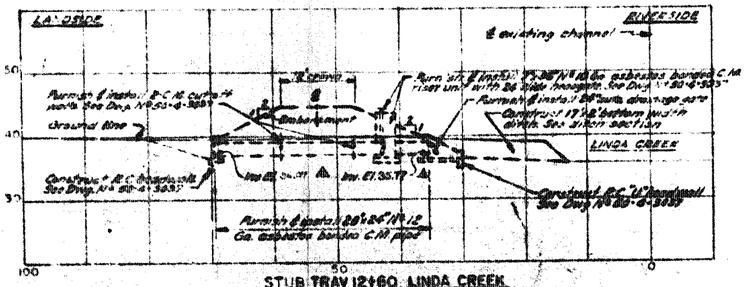
EXHIBIT G
Sheet 2 of 2


CORPS OF ENGINEERS
STRUCTURE NOTES ARCADE CREEK
North Levee
Sta. A 35+00 — Construct 48"x24" CM pipe 12 gage under ramp at toe of levee. Invert to be set in field.
Sta. A 35+30 — Remove and save 275 lin. ft. of cross fence.
Sta. A 35+30 to A 56+60 — Reconstruct 2050 lin. ft. of fence.
Sta. A 50+68 — Construct drainage facilities. See Sheet No. 392/19.
Sta. A 64+00 to A 64+75 — to 30' crown for turnaround.
Sta. A 64+25 — gate on levee crown. See Sheet No 392/4
Sta. A 64+90 to A 69+00 — ft. of fence. Reconstruct 350 lin. ft. of fence.
Sta. A 65+30 — cross fence and construct gate on levee crown. See Sheet No 392/4
Sta. A 65+73 — 392/19.
Sta. A 65+00 — Construct 50'X12" C.M.P. 12 ga. under Sac. N.R.R.
Sta. A 91+30 — Construct retaining wall, see Drwg. No.1-4-392, sheet 392/25
Sta. A 69+50 to B 1+75 — Surface crown of levee (4"x10'). See sheet 392/3
Sta. A 70+09 — Construct drainage facilities. See Sheet No. 392/19.
Sta. A 70+30 — Construct S-type ramp, landside, to connect with Rio Linda Blvd.
Sta. A 71+75 to A 72+50 — Remove and save 320 lin. ft. of fence.
Sta. A 77+12 — Construct drainage facilities. See Sheet No. 392/19.
Sta. A 79+00 to A 82+00 — Remove and save 300 lin. ft. of fence.
Sta. A 96+00 — Construct drainage facilities, see Dwg. No.1-4-392, sheet 392/19.2
Sta. A 84+62 — Construct drainage facilities. See Sheet No. 392/19.
Sta. A 86+40 to A 87+70 — Remove and save 400 lin. ft. of fence.
Sta. A 89+20 to A 90+00 — Remove and save 250 lin. ft. of fence.
Sta. A 93+36 — Construct drainage facilities. See Sheet No. 392/19.
Sta. A 90+69 — Construct drainage facilities. See sheet No 392/19
Sta. A 95+65 to A 97+30 — Remove 340 lin. ft. of fence. Reconstruct 130 lin. ft. of fence.
Sta. A 98+85 — Remove and save 80 lin. ft. of cross fence.
Sta. A 100+26 — Construct drainage facilities. See Sheet No. 392/19.
Sta. A 63+75 — Construct low water drain under bridge. See this sheet.
Sta. B 1+90 — Construct S-type ramp, 14' crown, surface (10"x12').
South Levee
Sta. A 35+30 — Remove and save 250 lin. ft. of cross fence.
Sta. A 62+65 to A 63+40 — Widen levee enlargement to 30' crown for turnaround surface (4"x26').
Sta. A 63+40 — Remove and reconstruct 80 lin. ft. of cross fence, and construct gate on levee crown. See Sheet No 392/4
Sta. A 64+15 — Construct drainage facilities. See Sheet No. 392/19.
Sta. A 64+50 — Remove and reconstruct 80 lin. ft. of cross fence, and construct gate on levee crown. See Sheet No 392/4
Sta. A 69+20 to A 110+20 — Surface crown of levee (4"x10'). See sheet No 392/3
Sta. A 69+00 — Construct S-type ramp, landside, (to connect with Rio Linda Blvd.) surface (4"x12') 14' crown, 8% grade.
Sta. A 77+00 to A 81+00 — Remove and reinstall 400 lineal feet of fence.
Sta. A83+00 (±) — Remove, reinstall and construct footbridge. See sheet No 392/24
Sta. A73+25 — Remove and reinstall 1" steel pipe siphon.
Sta. A 68+40 — Construct drainage facilities and realign 100 lin. ft. drainage ditch. See sheet No. 392/19
LEVEE CONSTRUCTION – NORTH LEVEE (20' CROWN)
LEVEE CONSTRUCTION – NORTH LEVEE (12' CROWN)
LEVEE ENLARGEMENT – SOUTH LEVEE (20' CROWN)
LEVEE ENLARGEMENT – SOUTH LEVEE (12' CROWN)
NO WORK
B 1+75 = END OF WORK N. LEV. ARCADE CR.
℄ B 0+00 = A 99+06 NORTH LEVEE
STA. A 110+20 = END OF WORK S. LEV. ARCADE CR.
Do not disturb well
Do not disturb well or pressure tank
Do not disturb trees
Do not disturb trees on landside levee slope.
6" Gas line crossing on bridge piers
12" Sewer line crossing on bridge piers
U.S.G.S. BM TT-11-WW 1947 Elev. 36.880
Telephone Cables
Power Lines
Arcade Blvd
Storm Sewer 15" C.M.P. Sta. "A" 95+49
P.G.&E. Trans Lines
Footbridge
HAGGINWOOD
RECREATION
U.S.C.&G.S. BM Elev. 33.748
PLAN
N.& S. LEVEES ARCADE CREEK
GRAPHIC SCALE
1" = 200'
AS CONSTRUCTED
PLAN – LOW WATER DRAIN UNDER S.N.R.R. BRIDGE
SCALE: 1 IN = 40 FT
Existing low channel
Channel borrow
Existing rock
24" CMP
Do not disturb bridge bents
Top bank
Flow
Bridge bent
Concrete abutment
Remove & replace existing rock
Top borrow
Btm El 18.5
Bottom borrow
Furnish & install 130' x 24" No 12 Ga CMP
SECTION "A-A"
SCALE: 1 IN = 40 FT HORIZ, 1 IN = 10 FT VERT
LOGS OF EXPLORATION HOLES
2F-10 Elev. 30.5
2B-19 Elev. 31.3
2F-11 Elev. 34.3
CEMENTED
LEGEND:
Silty Sand (SM)
Sandy Silt (ML)
Clayey Sand (SC)
Sandy Clay (CL)
% Water Content
Indicates presence of roots, humus, or organic materials.
Note:
All classifications are in accordance with the C. of E. "Unified Soil Classification System", dated March 1953.
Note:
All Elevations are referred to C. of E. Datum = 3.0 Ft below Mean Sea Level - 1929 General Adjustment.
All Coordinates are referred to California Coordinates.
6 Jan 57 Revised As Constructed
Work limit changed, Structure note changed.
SACRAMENTO RIVER, CALIFORNIA
FLOOD CONTROL PROJECT
AMERICAN RIVER – NATOMAS CANAL
ARCADE CREEK AND LINDA CREEK
LEVEE CONSTRUCTION
DECEMBER 1954

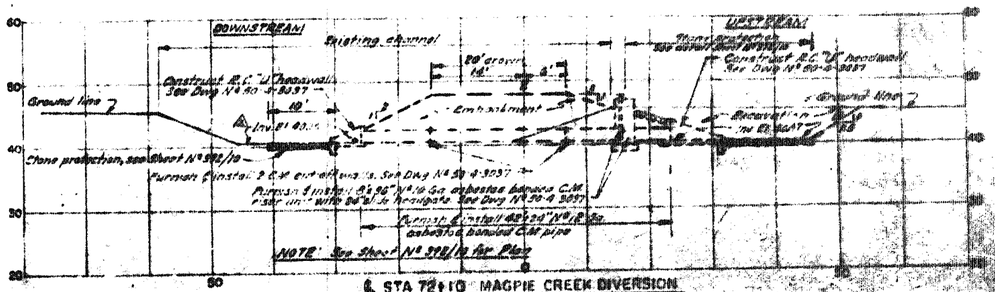
CORPS OF ENGINEERS



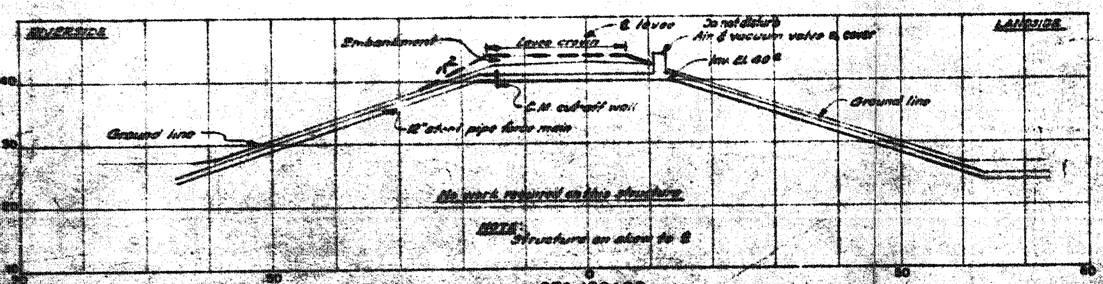
DITCH SECTION
NO SCALE



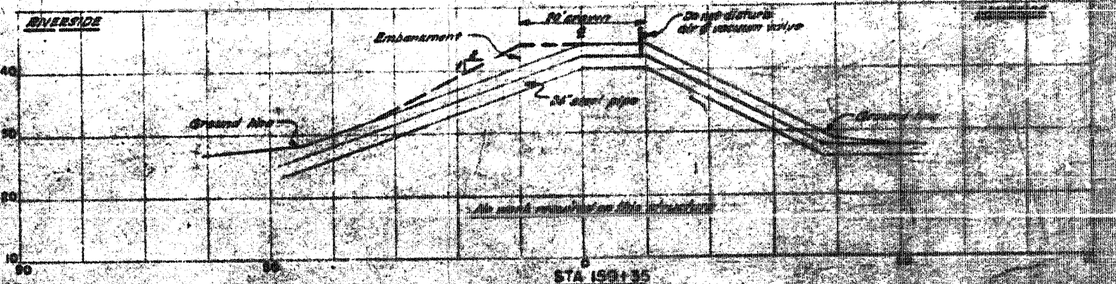
STUB TRAV 12+60 LINDA CREEK
GROUP B



℄ STA 72+10 MAGPIE CREEK DIVERSION
GROUP B



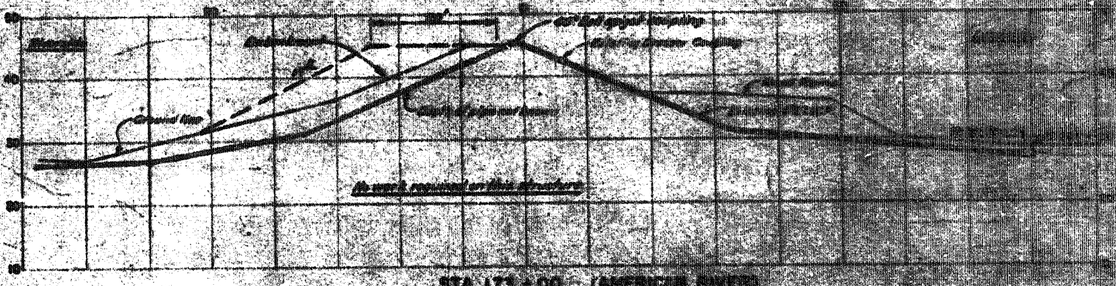
STA 180+00



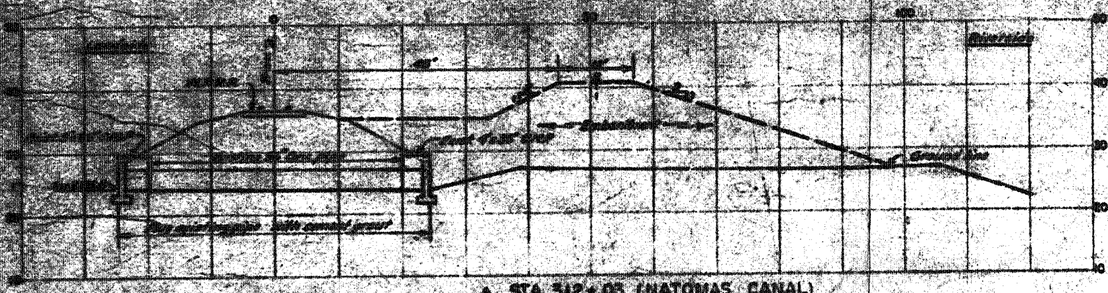
STA 159+35

AMERICAN RIVER

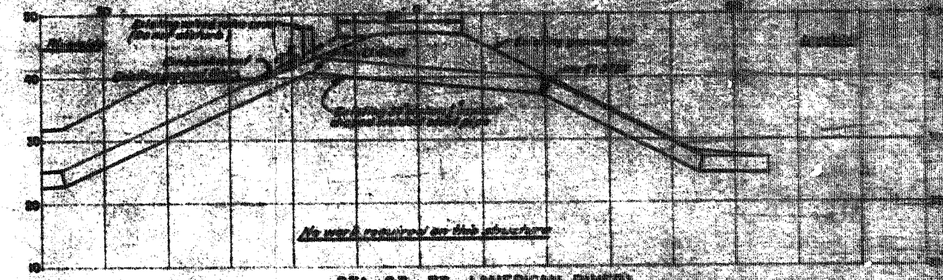
▲ STA. 290+92.40 (NATOMAS CANAL)



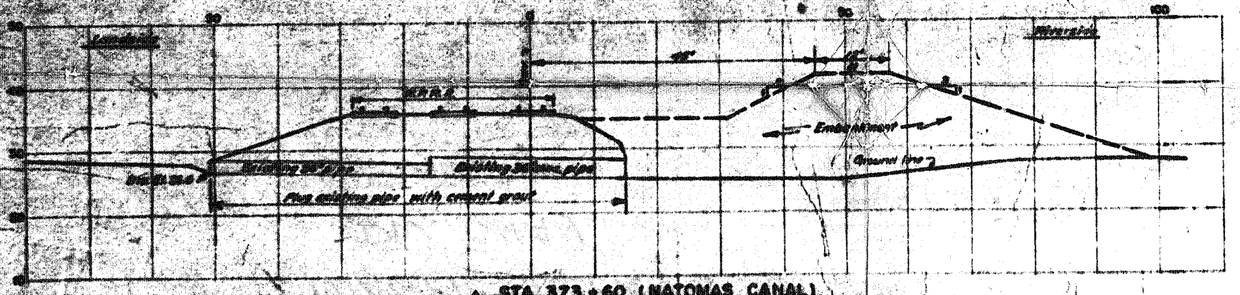
STA. 173+00 (AMERICAN RIVER)



▲ STA. 312+03 (NATOMAS CANAL)



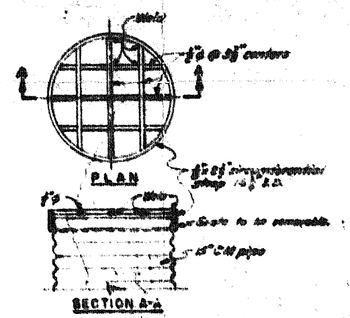
STA. 87+73 (AMERICAN RIVER)



▲ STA. 373+60 (NATOMAS CANAL)

STRUCTURE SECTIONS
SCALE: 1" = 10' HORIZ. & VERT.

NOTE
The exact locations and invert elevations of new drainage structures are subject to field adjustments



GRATE DETAIL ⚠
SCALE 1½ IN = 1 FT

STRUCTURE SECTIONS

N. LEVEE AMERICAN RIVER - E. LEVEE NATOMAS CANAL
LINDA CREEK AND MAGPIE CREEK DIVERSION
AS CONSTRUCTED

SACRAMENTO AREA, CALIFORNIA
FLOOD CONTROL PROJECT
AMERICAN RIVER NATOMAS CANAL
ARCADE CREEK AND LINDA CREEK
LEVEE CONSTRUCTION

CORPS OF ENGINEERS

N

CHANNEL EXCAVATION

NORTH LEVEE CONSTRUCTION (8' CROWN)

SOUTH LEVEE CONSTRUCTION (12' CROWN)

LINDA CREEK

LIMIT OF SPOIL

CHANNEL EXCAVATION

P J Garrette

A Klein

R G Arndt

A Hinds

Helen Grace

Leroy & Hilda Russell

J M Brewer

Lloyd & E Larsen

Dora L Hendricks

P J Garrette & Ruth Lewon

B & R Lewon

Pacific Northwest R R

S N R R

U.S.C.E. Bench Mark EL 97.09

U.S.G.S. BENCH MARK EL 97.92

R N Philpot

C Larsen

E Bennett

M E & A L Bennett

V E Gunderson

50' R-O-W

60' R-O-W

65' R-O-W

70' R-O-W

40' R-O-W

80' R-O-W

SOUTH LEVEE — NORTH LEVEE — CHANNEL — EMBANKMENT — EXCAVATION — GROUND LINE — SPOIL AREA — CLEARING LIMIT

⚠ ℄ STA 6+00 — APPLICABLE FOR ℄ STA'S 0+90 TO 13+20
SCALE 1 IN = 10 FT HORIZ & VERT

WEST SIDE — EAST SIDE — ℄ CHANNEL — EMBANKMENT — EXCAVATION — GROUND LINE

℄ STA 64+85 — APPLICABLE FOR ℄ STA'S 62+85 TO 74+00
SCALE 1 IN = 1 FT HORIZ. & VERT.

ELEVATIONS ℄ OF E DATUM

PROFILE
SCALE 1 IN = 500 FT HORIZ & 10 FT VERT

STONE PROTECTION DETAIL
NOT TO SCALE

LEVEE CONSTRUCTION (12' CROWN)

PLAN

DETAIL "A"

SOUTHSIDE — NORTHSIDE — CLEARING LIMIT — EXCAVATION — 50' MAINTENANCE ROAD

STA 84+15 STUB TRAY
SCALE 1 IN = 10 FT HORIZ & VERT

Compacted earth backfill — Bituminous surface plant mix — Crushed mineral aggregate — Compacted subgrade

ROAD SURFACING - ℄ Sta 244+15 (Div Chan)
NOT TO SCALE

PLAN

SECTION B-B

ROADWAY CROSSING DETAIL
NOT TO SCALE

AS CONSTRUCTED

Magpie Co. Design Flow = 250 cfs

DETAIL "A"

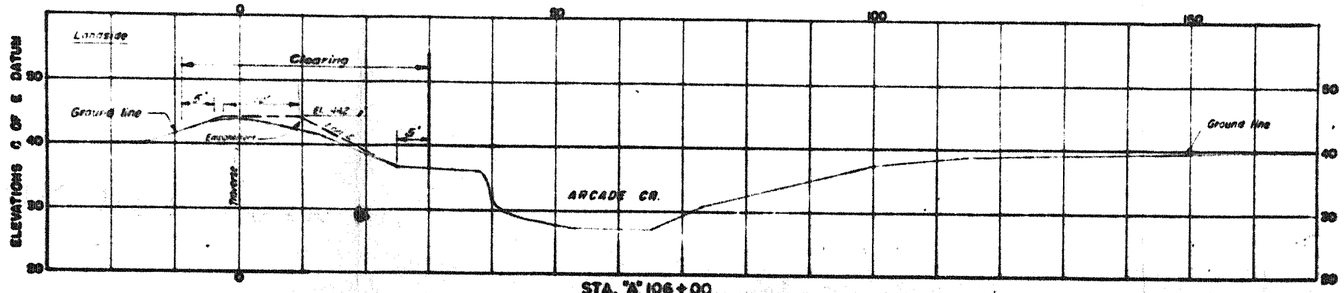
PLAN-PROFILE & TYPICAL SECTIONS
MAGPIE CREEK DIVERSION TO LINDA CREEK

SACRAMENTO RIVER, CALIFORNIA
FLOOD CONTROL PROJECT
LEVEE CONSTRUCTION

CORPS OF ENGINEERS

U. S. ARMY

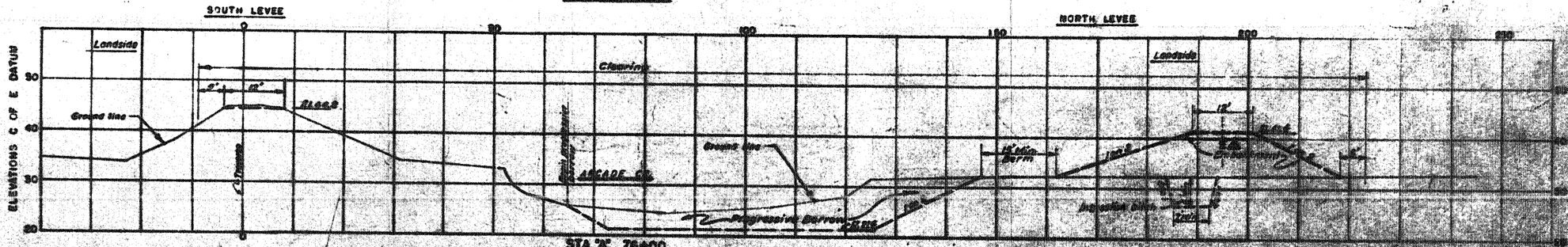
SOUTH LEVEL



STA. "A" 106+00

SOUTH LEVEE

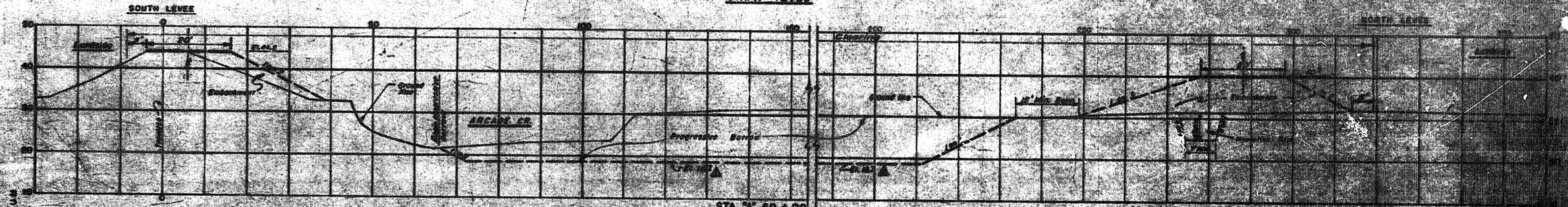
NORTH LEVEE



STA. "A" 76+00

SOUTH LEVEE

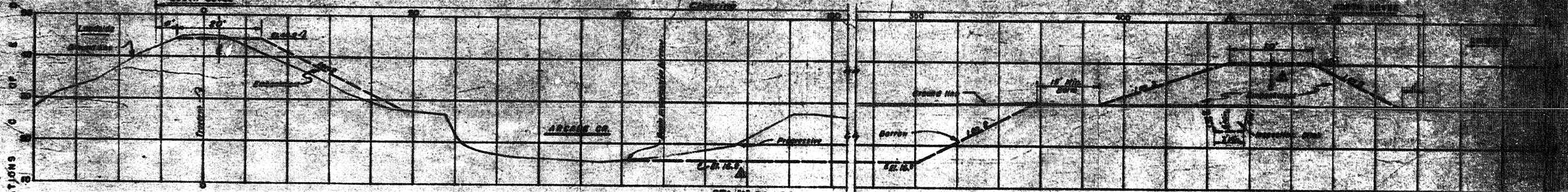
NORTH LEVEE



STA. "A" 49+00

SOUTH LEVEE

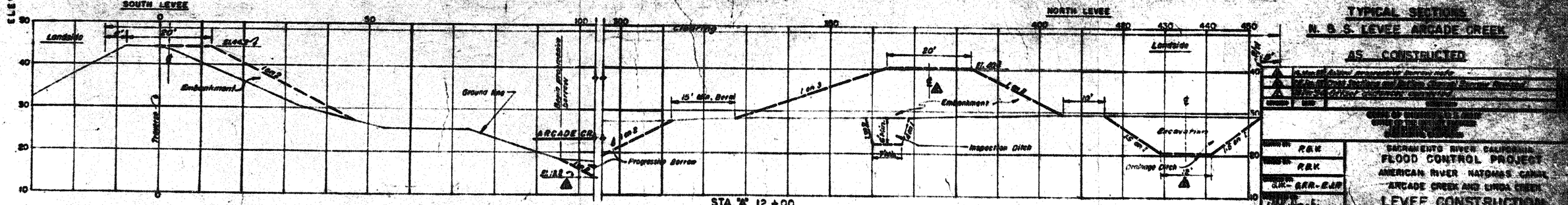
NORTH LEVEE



STA. "A" 38+00

SOUTH LEVEE

NORTH LEVEE



STA "A" 12+00

TYPICAL SECTIONS
SCALE: 1"=10' HORIZ. & VERT.

NOTE:
All Elevations are referred to C of E Datum = 3.0 ft. below Mean Sea Level, 1929 General Adjustment.

NOTE Removal of progressive Borrow in Arcade Creek shall be such as to provide the minimum bottom width channel as follows:

Sta A 4+00 to A 60+00 80' Min channel
Sta A 60+00 to A 63+80 transition from 80' to 30' Min channel
Sta A 63+80 to A 64+80 no channel excavation
Sta A 64+80 to A 68+00 30' Min channel
Sta A 68+00 to A 69+00 no channel excavation
Sta A 69+00 to A 80+00 30' Min channel
Sta A 80+00 to A 82+00 transition from 30' to 80' Min channel
Sta A 82+00 to A 90+00 80' Min channel
Sta A 90+00 to A 92+00 transition from 30' to 80' Min channel
Sta A 92+00 to A 102+00 80' Min channel

TYPICAL SECTIONS
N. & S. LEVEE ARCADE CREEK
AS CONSTRUCTED

DESIGNED	DRAWN	CHECKED

CORPS OF ENGINEERS U.S. ARMY
SACRAMENTO DISTRICT

DESIGNED R.B.K.	SACRAMENTO RIVER CALIFORNIA
DRAWN R.B.K.	FLOOD CONTROL PROJECT
SUBMITTED C.E.R.- C.A.R.- C.L.B.	AMERICAN RIVER NATOMAS CANAL
RECOMMENDED	ARCADE CREEK AND LINDA CREEK
APPROVED	LEVEE CONSTRUCTION
DATE	